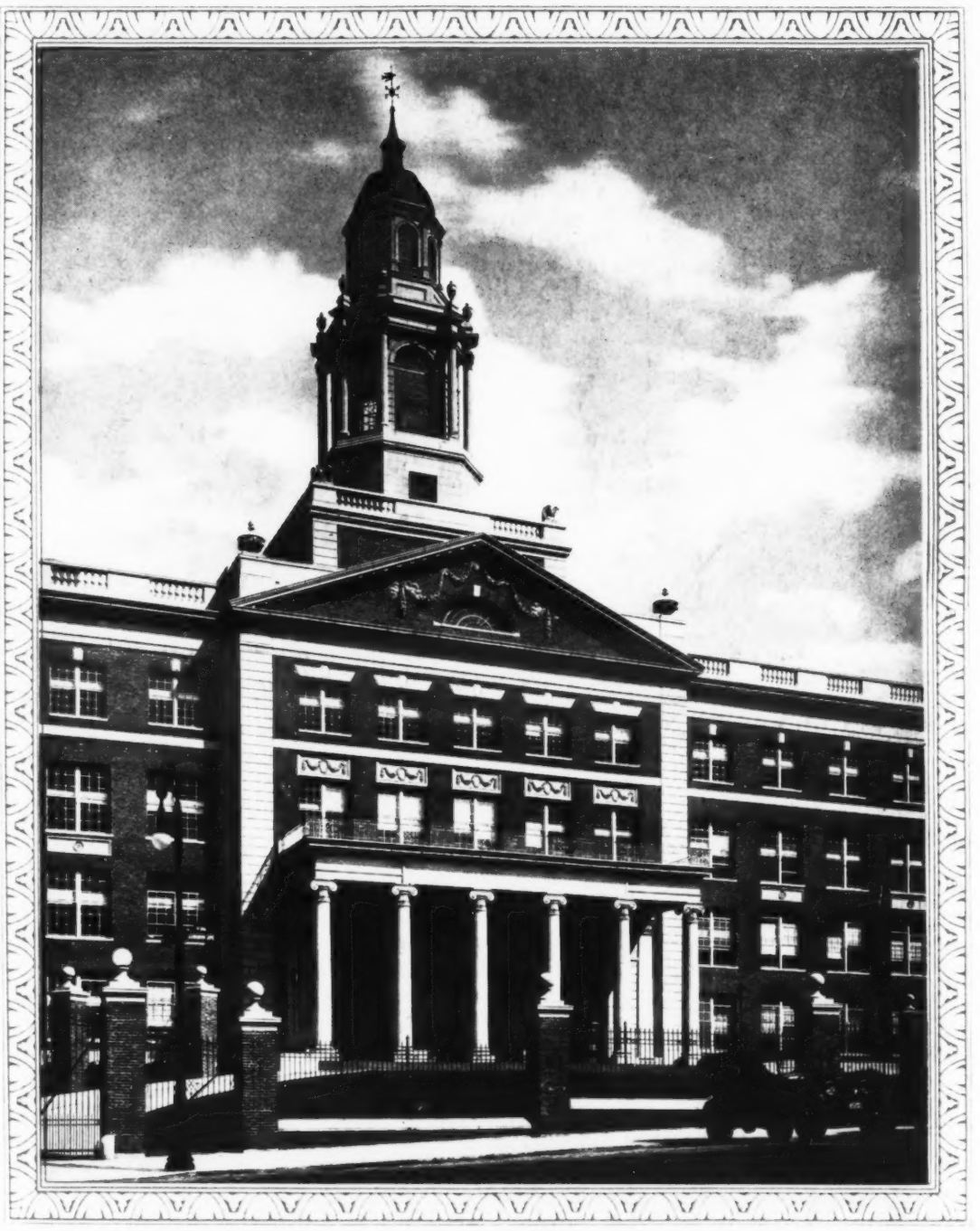
SEP 3 1928

PERIODICAL ROOM
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THE AMERICAN
School Board Journal

A PERIODICAL of SCHOOL ADMINISTRATION



September, 1928

THE BRUCE PUBLISHING COMPANY

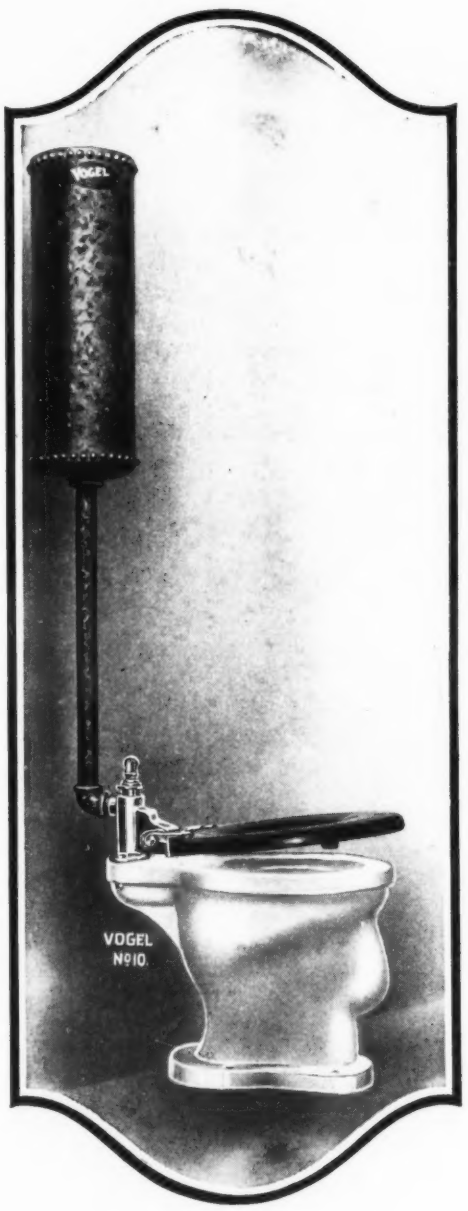
CHICAGO MILWAUKEE, WIS. NEW YORK

New **VOGEL** *Number TEN*

PATENTED

Automatic School Water Closet

DESIGNED TO WITHSTAND THE HARDEST USAGE



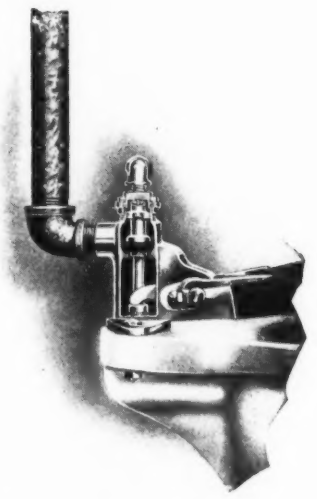
When the closet seat is depressed the supply valve packing is drawn down from the top supply valve seat, and the flush valve packing is brought into contact with the flush valve seat, allowing water to enter the tank through the flush pipe. Upon the pressure of water and air in tank becoming equalized with the service pressure, no more water enters the fixture. This water is held in readiness for the release of the seat.

When the seat is released the rod which carries both supply and flush valve packings is forced upward closing the water supply at the inverted supply valve seat in the swivel at the top. The flush valve, by the same movement, is opened and a strong flush of water from tank to bowl ensues.

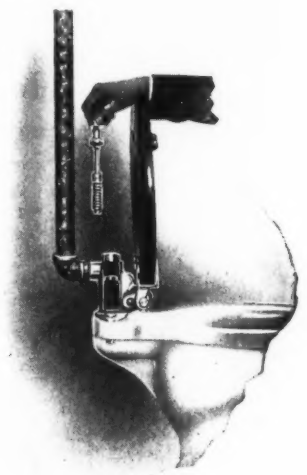
The tank is practically indestructible as is also the flush pipe. The valve is constructed heavily throughout of good quality material and attached to the bowl by a very strong connection. The closet seat is of a durable make and the bowl is of vitreous china.

Economical in the use of water.

The simplest and most durable automatic water closet.



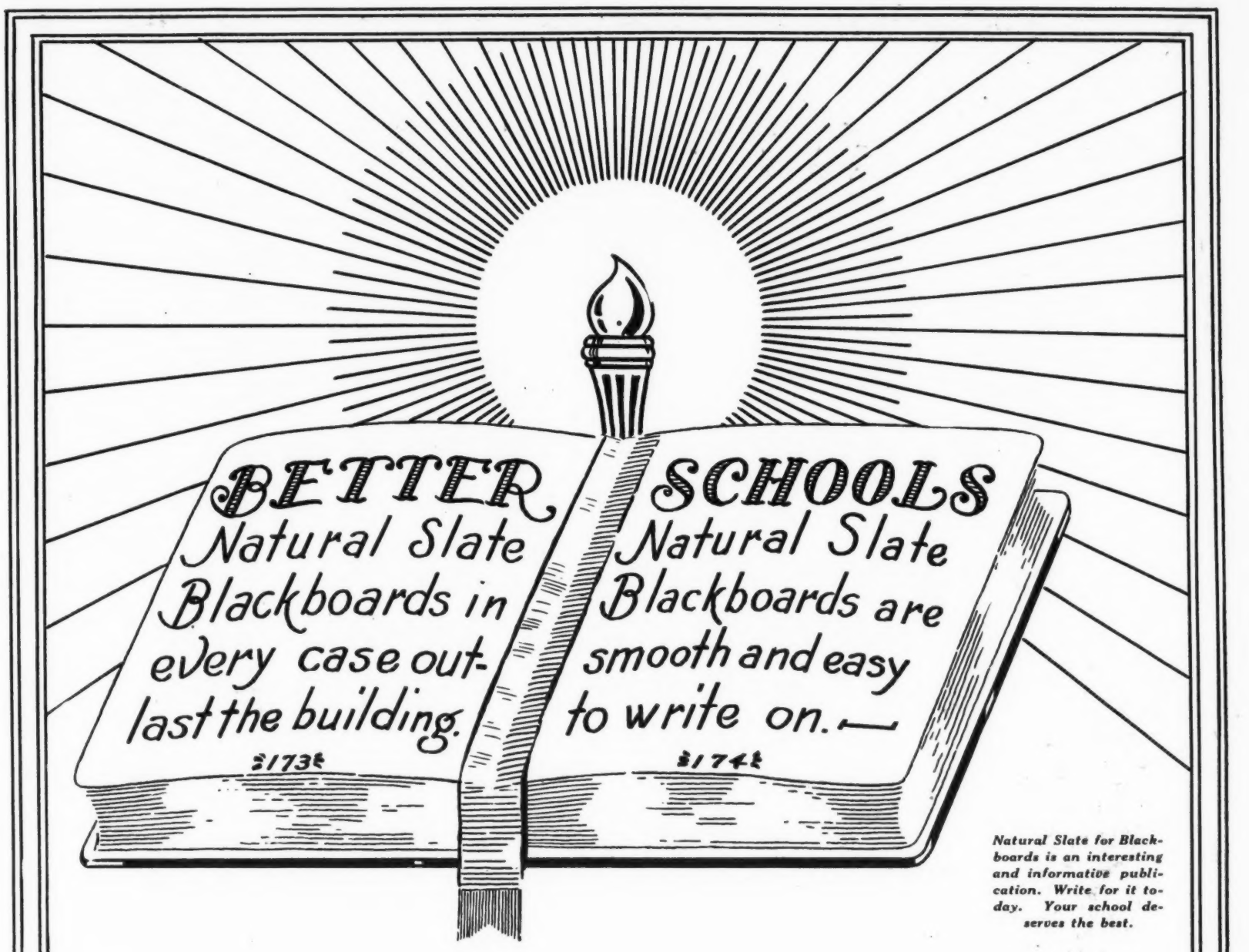
A sample valve was tested 150,000 operations without any appreciable wear.



Sold by Wholesalers of Plumbing Supplies Everywhere

JOSEPH A. VOGEL CO.

Wilmington, Delaware **St. Louis, Missouri**



Natural Slate for Blackboards is an interesting and informative publication. Write for it today. Your school deserves the best.

THE PREFERENCE OF PUBLIC OPINION

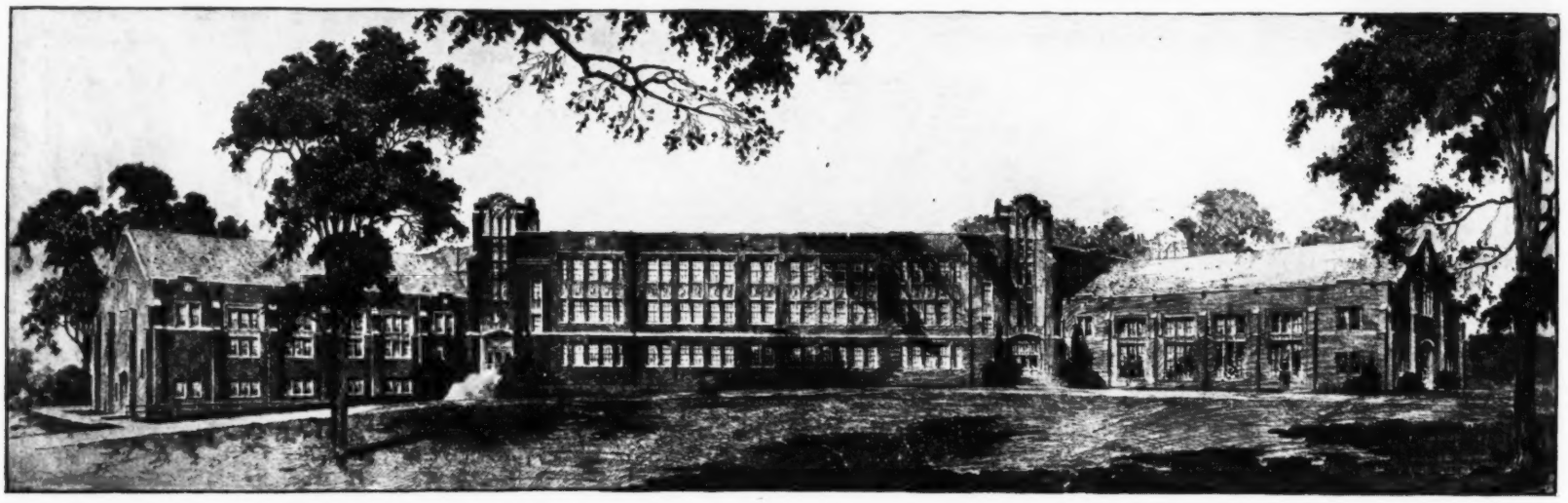
The long list of schools and institutions that insist upon, and use exclusively Natural Slate Blackboards, decisively reflects the trend of public opinion.

Natural Slate Blackboard's ideal writing surface and fine even texture together with its clean, sanitary and fireproof features are extremely vital factors in the work and success of the student.

There are no upkeep and no maintenance costs after it has been installed. In fact we can relate to you quite a few cases where "Natural Slate Blackboards Outlast The Building".

NATURAL SLATE BLACKBOARD CO.
908 Robinson Ave. PEN ARGYL, PA.

NATURAL SLATE "CENTURIES OF SERVICE" PYRAMID NATURAL SLATE BLACKBOARDS Proof against Time - Wear - Water - Fire BLACKBOARDS



A Barrett Specification Roof protects the High School at High Point, N. C. Architect: Harry Barton, Greensboro, N. C. Contractor: J. E. Beaman Construction Co., Raleigh, N. C. Roofer: J. H. Griffin, Greensboro, N. C.

When these roofs are laid down .... *they're down to stay!*

SEEING *is* believing! Look over the school field and you'll discover that the Barrett Specification Roof holds the lead by a great majority.

But why, you ask . . . what *is* there about these roofs that warrants such extensive use? The reasons are simple enough. Just consider these facts and draw your own conclusions!

When a Barrett Specification Roof is put down a 20 year* Surety Bond goes with it . . . guaranteeing you against repair or maintenance expense for the entire period stipulated in the bond. *Not one penny for upkeep in 20 years!*

And at the end of this insured period, what then? Just this . . . architects and school board directors know that many of these roofs go through 30 and even 40 years without a comeback . . . without serious depreciation.

But that's not all. Consider, too, this fire-safety advantage — so vital in school-roofing. Flying sparks and embers sputter out harmlessly on the protective slag or gravel surface of a Barrett Specification Roof. And should fire start in the interior of the building—taxing the supports of the roof deck—the roof itself has the necessary reflex strength to be self-supporting over a large area. *Remember this* . . . Barrett Specification Roofs are given a Class A . . . *base rating* . . . by the National Board of Fire Underwriters.

For further facts concerning these expense-free, trouble-proof roofs, dictate a note to our Built-up Roof Department.

*The Barrett Company also offers a Specification Type "A" Roof which is bonded for 10 years. This type of roof is adaptable to a certain class of buildings. The same high-grade materials are used, the only difference being in the quantities applied.

Depend on the Barrett Approved Roofer

Throughout the United States and Canada a limited number of roofing contractors have been approved by Barrett to lay the Barrett Specification Bonded Roof. These men have earned a reputation for doing efficient work—a name for absolute dependability.

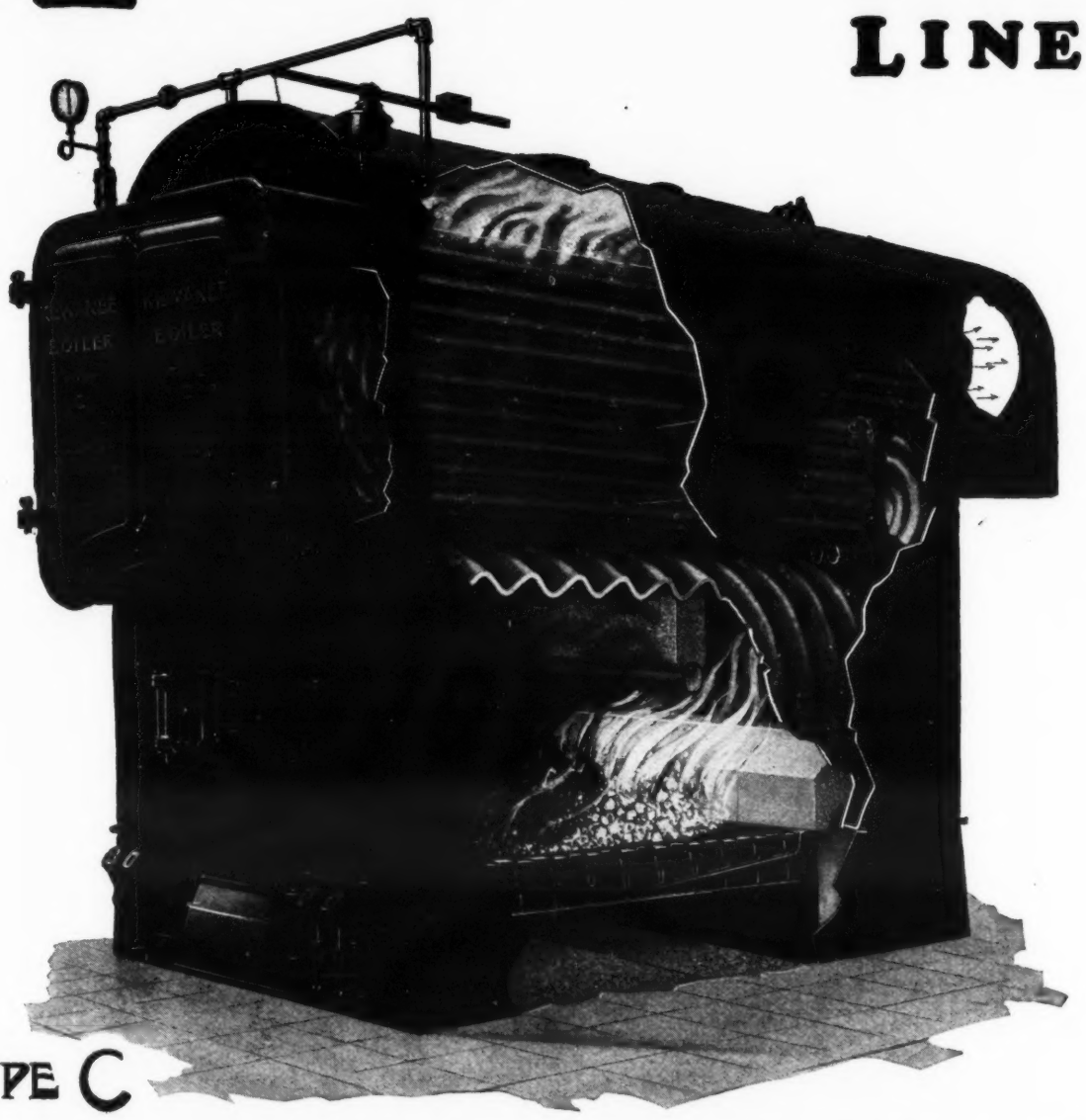
Good workmanship is a big part of any good roof. Good workmanship is a certainty when you provide for a Barrett Specification Roof.

THE BARRETT COMPANY, 40 RECTOR STREET, NEW YORK CITY

IN CANADA: The Barrett Company, Limited
5551 St. Hubert St., Montreal, Quebec, Canada

Barrett Specification Roofs

LATEST ADDITION TO KEWANEE LINE



TYPE C

STEEL WELDED BOILER

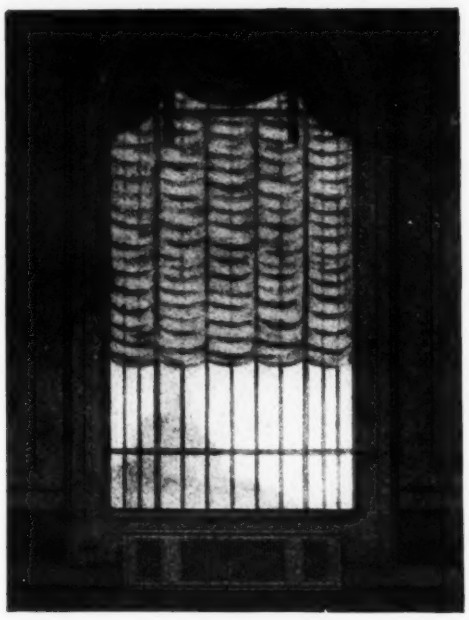
Type C Smokeless Series carries full rated load 2,300 to 32,000 feet of Radiation

Catalog No. 84 gives the details

KEWANEE BOILER CORPORATION

KEWANEE. ILLINOIS

Branches in 40 Principal Cities



Johnson Dual Thermostat Heat Control Will Put Your Schools On The Economy Basis You Seek . . . . .

Measure the economy your schools will realize with Johnson Dual Thermostat Heat Control, by subtracting 40 per cent from the coal item of your year's budget. That is the coal saving Johnson Dual Thermostat, Night and Day, Control can produce. That form of figuring, with the Johnson reputation for utmost reliability, should settle the matter of installing Johnson Dual Thermostat Heat Control in all of your schools.

JOHNSON SERVICE COMPANY, MILWAUKEE
AUTOMATIC TEMPERATURE REGULATION SINCE 1885
TWENTY-NINE BRANCHES UNITED STATES & CANADA

Automatically controlling each schoolroom constantly and correctly at the degree of temperature required during school hours, regardless of outdoor weather changes: Johnson



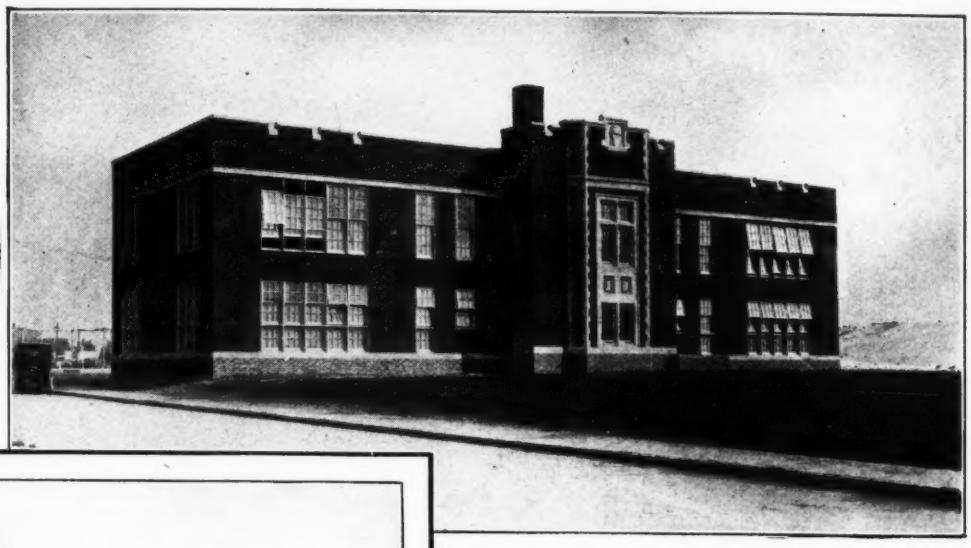
Dual Thermostat System supplies a night time fuel economy as well. At the close of school for the day, operation of a wall switch turns off the heat in all the rooms, save those to be used at night: for night classes, meetings, etc. Next morning the same wall switch operation turns on the heat in all of the rooms again for the day. A day and night heat control convenience and fuel economy factor of invaluable worth; *and definitely essential.*

JOHNSON
SYSTEM OF TEMPERATURE AND HUMIDITY CONTROL

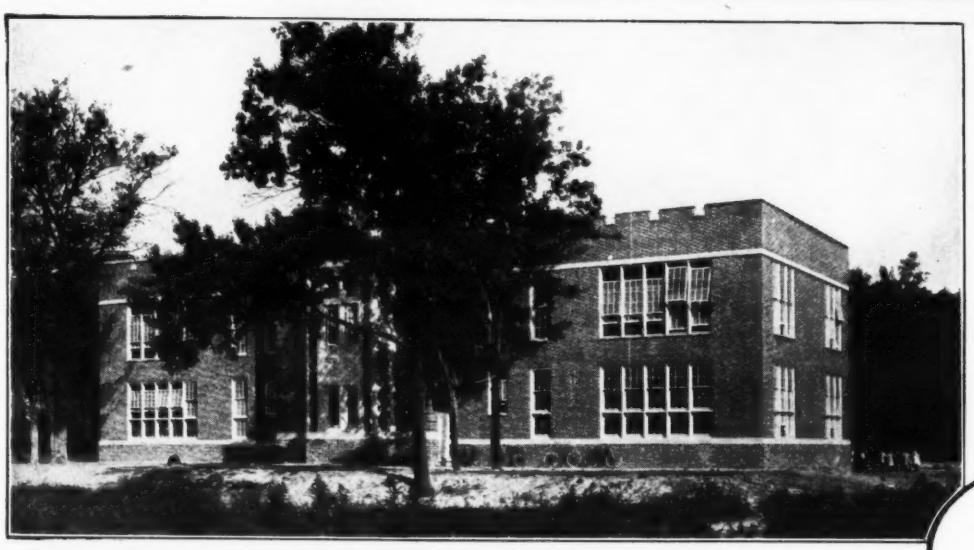
The All Metal System . . . . .

JSC

. . . . . The Dual Thermostat System



Pulaski School, Gary, Indiana. Joe Wildermuth, Architect. One 8300 Pacific Smokeless Boiler installed by Burke Bros. Plumbing & Hardware Co.



Forty-Fifth Avenue School, 45th and Madison Street, Gary, Indiana. Joe Wildermuth, Architect. Burke Bros. Plumbing and Hardware Co., Heating Contractors. One 8300 Pacific Smokeless Boiler installed.

Gary (Indiana)

11 Pacific Heated Schools

THE public schools of Gary measure up to the high standards which have made this city famous for its civic planning and improvements. In Gary schools Pacific boilers are being used as standard boiler equipment.

Pacific Smokeless Boilers, the type used in Gary schools, will not violate the most rigid smoke ordinance. Non-smoking combustion is completed in the firebox by means of patented features built into the boiler at the factory. When a good grade of "mine-run" bituminous coal is properly fired, there's no smoke — that is guaranteed.

Pacific Smokeless Boilers attain remarkably high efficiency. They embody three Pacific construction features—greater direct heating surface, larger combustion space, longer fire travel — which have established Pacific leadership in heating school buildings everywhere. Also built in direct draft and down draft types, for burning hard or soft coal, oil or gas.

Write today for catalog and complete information.

STEEL HEATING BOILERS · PACIFIC · WAUKEGAN, ILL. BRISTOL, PA. · TRADE MARK REG. U.S. PAT. OFF.

PACIFIC

STEEL HEATING BOILERS

FACTORIES: WAUKEGAN, ILL., BRISTOL, PA.

Von Duprin

Self-Releasing Fire Exit Latches

Sweets, Pages B2036-2039

AIA 27c5

The best sales argument for Von Duprin latches is not a written advertisement; it is their use on the greater part of the important buildings here and abroad.

VONNEGUT
HARDWARE CO.
Indianapolis, Ind.





"SO THIS IS NEW YORK"

HERE you have a new view of New York—a Manhattan sky-line in which every building has *Columbia* Window Shades and Rollers.

As you consider this statement and the picture to which it applies, two thoughts are very likely to strike you:—

1—"*Columbia* Window Shades must be fine window shades —well made, durable, good looking." Right!

2—"*Columbia* Window Shades must be expensive." Wrong!!

It is, of course, possible to get cheaper window shades than *Columbia* Window Shades. But—

Quite a number of eminent architects—the creators of the splendid skyscrapers shown above—appear to agree with us, that *Columbia* Window Shades are priced right as well as made right.

THE SHERRY-NETHERLAND
Schultze & Weaver, Architects, Schroder & Koppel, Inc., General Contractors.

PARAMOUNT BUILDING and THEATRE
C. W. & Geo. L. Rapp, Architects. Thompson, Starrett Co., General Contractors.

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McKenzie, Voorhees & Gmelin, Architects. Marc Eidlitz & Son, General Contractors.

NEW YORK EVENING POST BUILDING
Horace Trumbauer, Architect. Thompson, Starrett Co., General Contractors.

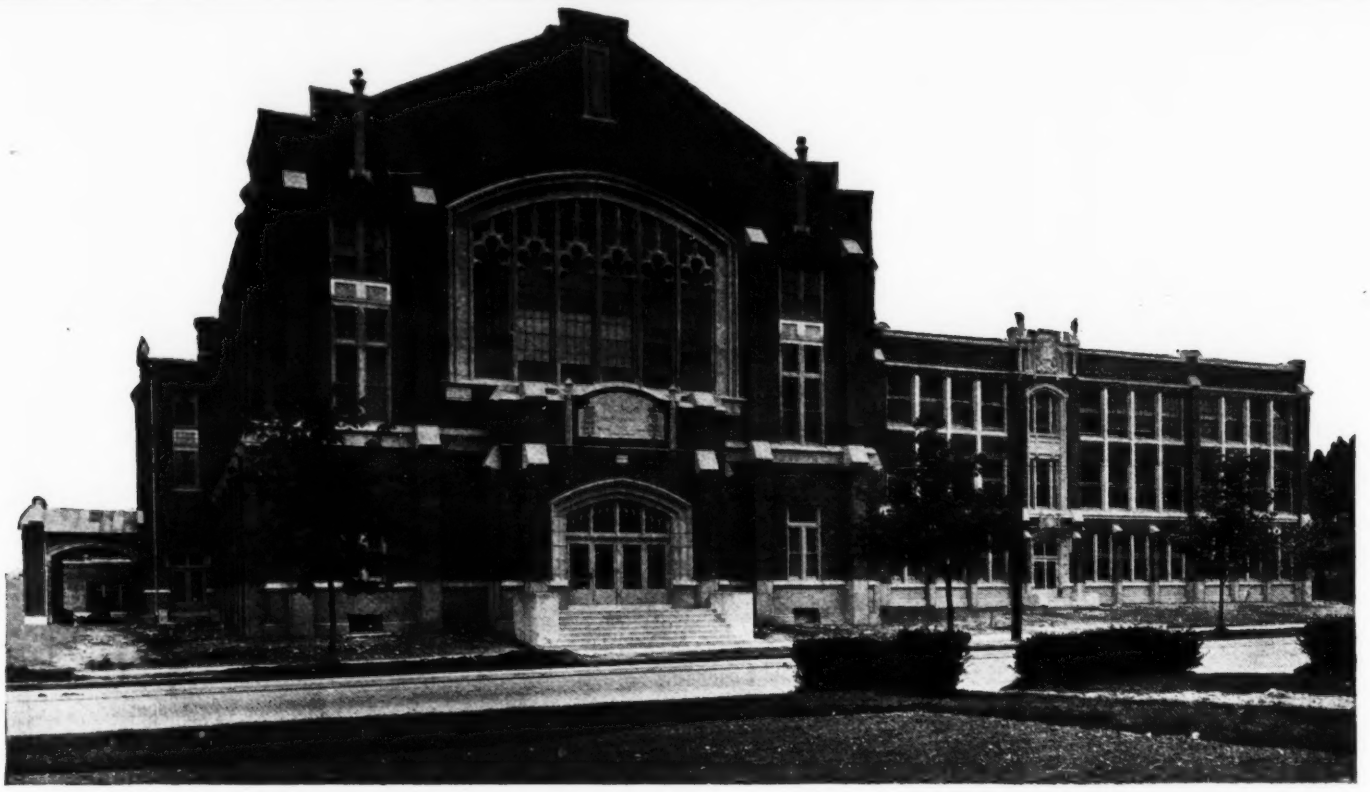
THE BARBIZON
Murgatroyd & Ogden, Architects and General Contractors.

THE SAVOY-PLAZA
McKim, Mead & White, Architects. George A. Fuller Co., General Contractors.

The *Columbia* Mills, Inc., 225 FIFTH AVENUE, NEW YORK

Baltimore Boston Chicago Cincinnati Cleveland Dallas Detroit
Fresno Kansas City Los Angeles Minneapolis New Orleans Philadelphia
Pittsburgh Portland (Ore.) St. Louis Salt Lake City San Francisco Seattle

Columbia GUARANTEED WINDOW SHADES *and* ROLLERS



C. T. Plunkett Junior High School, Adams, Mass., Spencer-Cleaned. *Frank Irving Cooper Corp., Architects.*

A pound of dirt— can harm a thousand children

Tracked in on muddy or dusty days — from nobody knows where—every day every school in the country receives its grist of dirt and dust.

Hand methods will not remove it all—in fact on test it has been proved that the **Spencer Central Cleaning System** will remove a pound more of dirt than hand methods in the small space of four rooms.

In other words, the Spencer System removed 171 per cent as much dirt as the brush.

Some of the direct results as reported in "An Analysis of Janitor Service in Elementary Schools" by C. E. Reeves, Ph.D., are as follows:

1. The vacuum cleaner covers all space better than the brush, it being possible to use it under teachers' desks, around desk legs, and under radiators, where the brush fails.
2. With the vacuum, no marks of the apparatus remain, and if all space is covered, dust will not remain on the floor at the completion of the cleaning process.
3. The vacuum cleaner does not stir dust into the air as does a brush on an unoiled floor or on one from which the oil has been partially worn off. The vacuum cleaner takes all dust directly from the room to the basement.
4. After cleaning by means of the vacuum cleaner, less dust arises from stamping on the floor, because the vacuum draws the dirt from cracks in the floor while the brush, at best, can remove only a part of such dirt.

More than
10,000
Schools
Hotels
Banks
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are Spencer Cleaned.

Let us send you our list of over 1500 schools that use the Spencer System.

The Spencer System is not expensive when the health of the children and its low operating cost are considered. It can be installed in any school—old or new, large or small. We would like an opportunity to present you or your architect with some of the facts.

THE SPENCER TURBINE CO.

492 NEW PARK AVE., HARTFORD, CONN. CENTRAL CLEANING SYSTEMS REPRESENTATIVES IN 50 CITIES

2689

Our Contribution
to the art of Heating & Ventilation



FIVE YEARS AGO when the Herman Nelson light weight, compact, indestructible radiator was placed on the market, it was immediately accepted as the greatest advance in the art of Heating and Ventilation in a generation. It has made possible heating and ventilation dependability and performance hitherto unattainable.

The Herman Nelson Wedge Core Radiator is an exclusive feature of all Herman Nelson Heating and Ventilating Products and accounts for their unequaled performance.

HEATING · VENTILATING · COOLING · DRYING · CONDENSING

UNIVENT



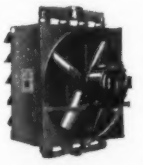
for the ventilation of schools, hospitals, offices and other buildings presenting an acute ventilating problem.

HERMAN NELSON *Invisible* RADIATOR



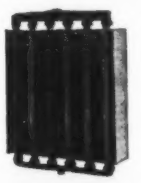
. . . supersedes all previous radiators, radiator cabinets or enclosures. Occupies no room space and makes possible any desired decorative scheme or furniture arrangement. Indestructible in service.

THE HERMAN NELSON hiJet UNIT HEATER



It operates at steam pressures from 1 to 150 lbs., and offers the better and more economical way of diffusing heat in Factories, Railroad Shops, Roundhouses, Mills, Warehouses, Garages, Gymnasiums and Industrial Buildings.

Herman Nelson Radiator Sections
for Blast Heating and Cooling



Indestructible, operating at any steam pressure from 1 to 150 lbs., non-corrosive and leak-proof.

May be arranged in banks to solve any special problem of heating or cooling.

THE HERMAN NELSON CORPORATION · *Moline, Illinois*

Builders of Successful Heating and Ventilating Equipment for over 20 Years

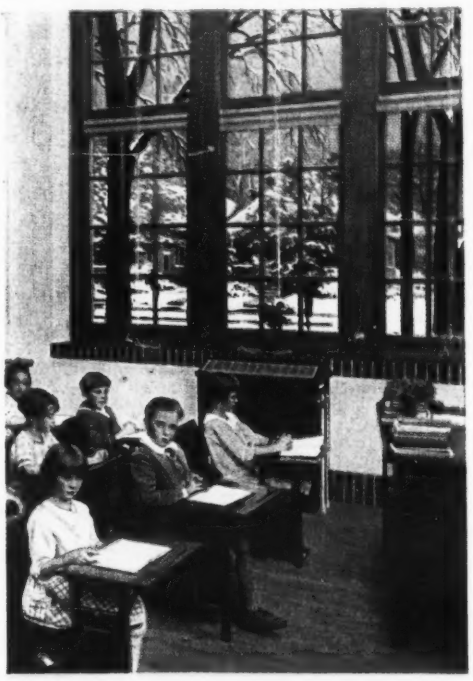
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UNIVENT VENTILATION often imitated but never duplicated

THE Univent, itself, is a complete individual ventilating machine, for drawing fresh air directly from out-of-doors—cleaning it—warming it to a comfortable temperature—and silently delivering it in such a manner that there is an agreeable air motion—but without drafts.

Today, thanks to the Univent, the principle of unit ventilation is nationally recognized. Naturally, many manufacturers are seeking to supply the market the Univent has created. But mark this. The results brought by Univent Ventilation are due to exclusive features of the Univent itself. They may be imitated but *cannot* be duplicated in other unit ventilators. Where the health, energy and mental efficiency of our children is at stake, ventilation should be purchased on proven results. To realize the epochal results of the Univent system, one need only refer to School Executives, Architects and Engineers everywhere who endorse it as the best, simplest and most economical.



UNIVENT
VENTILATION

Write for our book
"Univent Ventilation No. 29"

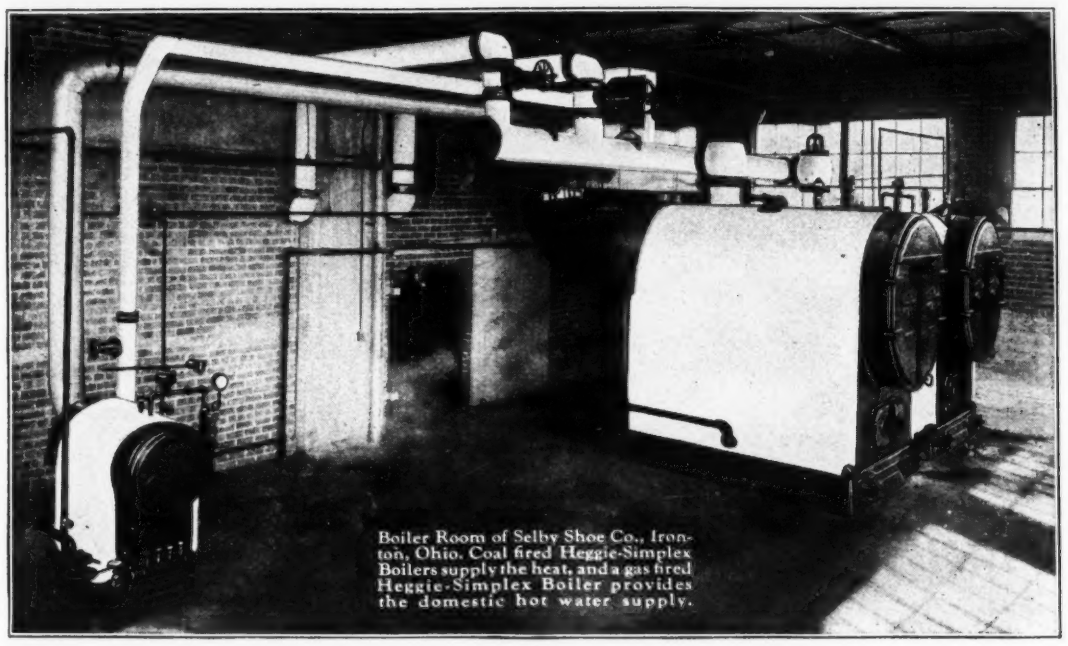
Univent *and* Glass *make the difference*

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Builders of Successful Heating and Ventilating Equipment for over 20 Years

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NEW YORK CITY	SCRANTON	DETROIT	INDIANAPOLIS	MINNEAPOLIS	DALLAS	SPOKANE	TORONTO
UTICA	PITTSBURGH	CLEVELAND	CHICAGO	ST. LOUIS	EMPORIA	PORTLAND	WINNIPEG, MAN.



Boiler Room of Selby Shoe Co., Ironton, Ohio. Coal fired Heggie-Simplex Boilers supply the heat, and a gas fired Heggie-Simplex Boiler provides the domestic hot water supply.

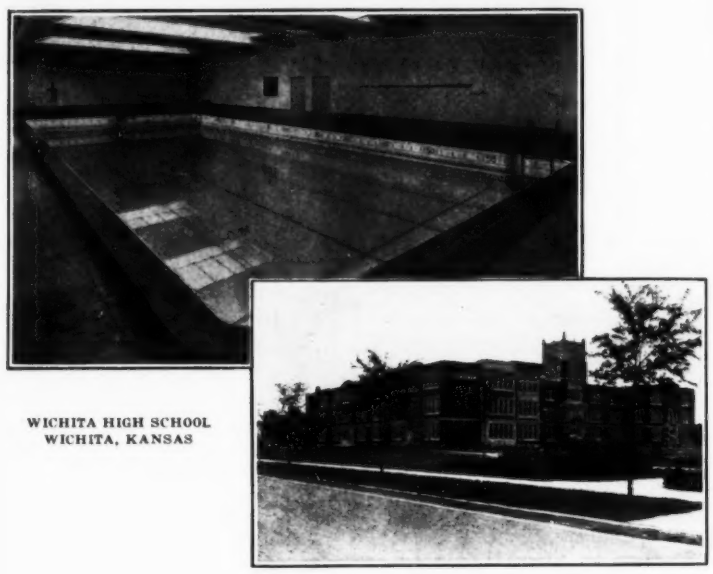
Uniformly High Quality —the basis of success

THE high standards of precision established by the Heggie-Simplex Boiler Company make quality materials and quality workmanship essential. Whether you make the briefest or the most exacting inspection of a Heggie-Simplex Boiler, you will find that every detail is in keeping with the reputation we have created for uniformly high quality throughout. And it is that enviable reputation which helps to explain why our sales for the first fiscal period of this year exceeded last year's volume by 95%.

Heggie-Simplex Boiler Co., Joliet, Illinois. Representatives in principal cities — telephone and address listed under "Heggie-Simplex Boiler Company."

HEGGIE-SIMPLEX

ELECTRIC-WELDED STEEL HEATING BOILERS



WICHITA HIGH SCHOOL
WICHITA, KANSAS

And at Wichita

— They "Swim in Drinking Water"

—For the swimming pool at the Wichita High School is equipped with a modern water purification plant. The water is constantly pumped from the pool, forced through a dependable filter to remove all turbidity and suspended material, — heated to maintain a uniform temperature and then *sterilized* by a W&T Swimming Pool Sterilizer by the process of chlorination.

The use of a modern recirculating system in connection with a W&T Swimming Pool Sterilizer insures the sanitary quality of the water in the pool so that the School Board and the Superintendent may know that the water conforms to all public health requirements.

Chlorination is the accepted standard for swimming pool sterilization because chlorination — and chlorination alone — imparts a residual sterilizing action to every drop of water in the pool and its action is continuous throughout the pool.

Our technical publication No. 41 discusses swimming pool sanitation in interesting fashion and describes several types of W&T Swimming Pool Sterilizers. May we send you a copy?

"Swim in Drinking Water"

SP-3-5

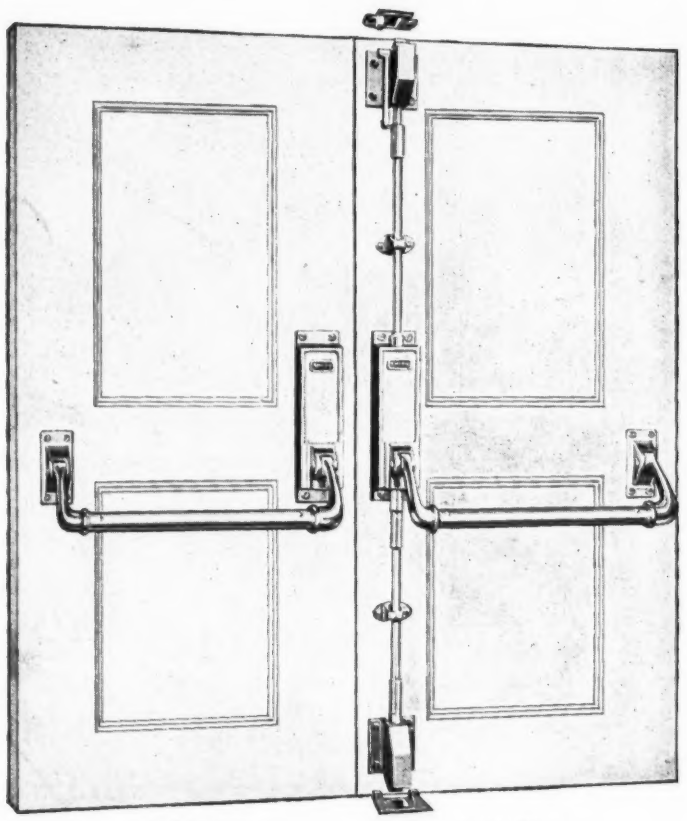
WALLACE & TIERNAN
COMPANY, INCORPORATED
Manufacturers of Chlorine Control Apparatus
NEWARK , NEW JERSEY

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SMITH'S IMPROVED PANIC EXIT LOCKS

NO. 80 LINE

Gravity Panic Exit Bolts



Inside View
Has Outside Trim.

Inside View
No Outside Trim.

Bolts are operated by a slight pressure on the Cross Bar.

Bolts are not dependent on springs for opening or closing operation.

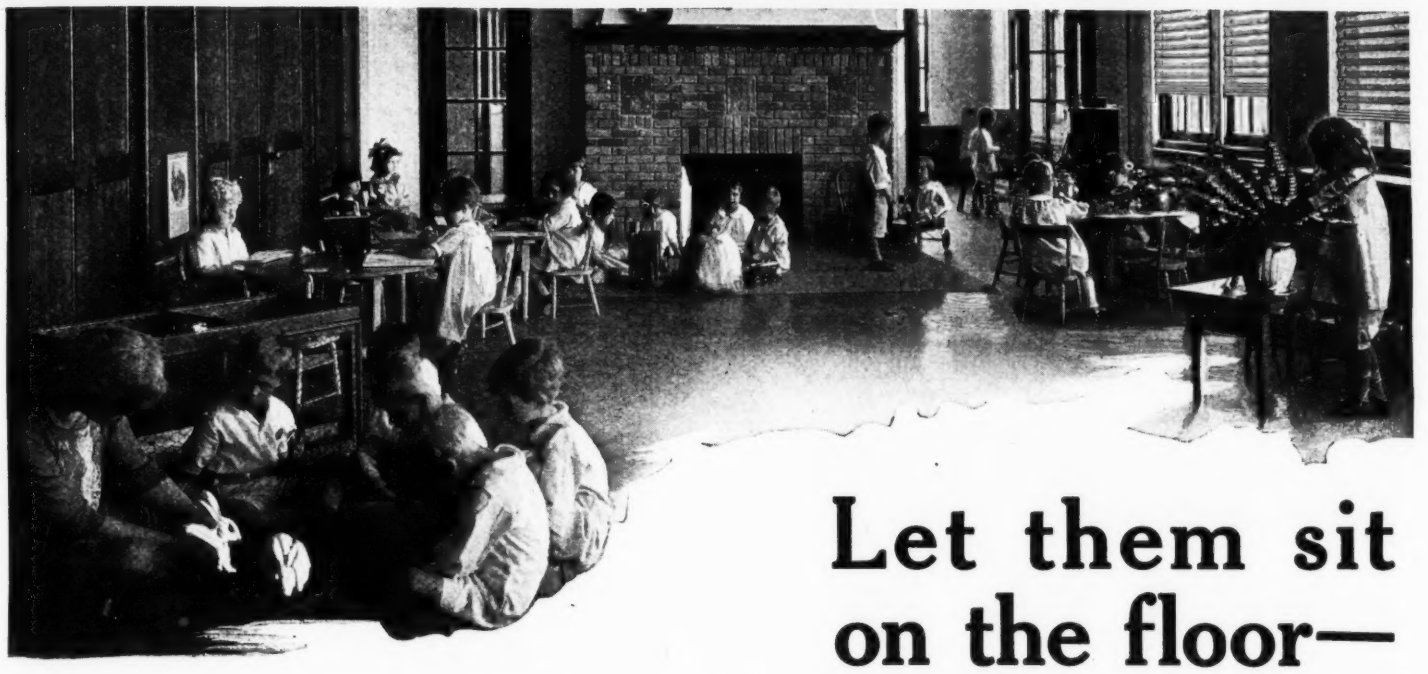
Simple but sturdy in construction and easily installed.

Will operate perfectly in connection with standard makes of door closers.

Catalogue No. 30 with Supplement "A" sent on request..

Manufactured by

THE STEFFENS-AMBERG CO.
260-270 Morris Ave.
NEWARK, N. J.



Let them sit on the floor—

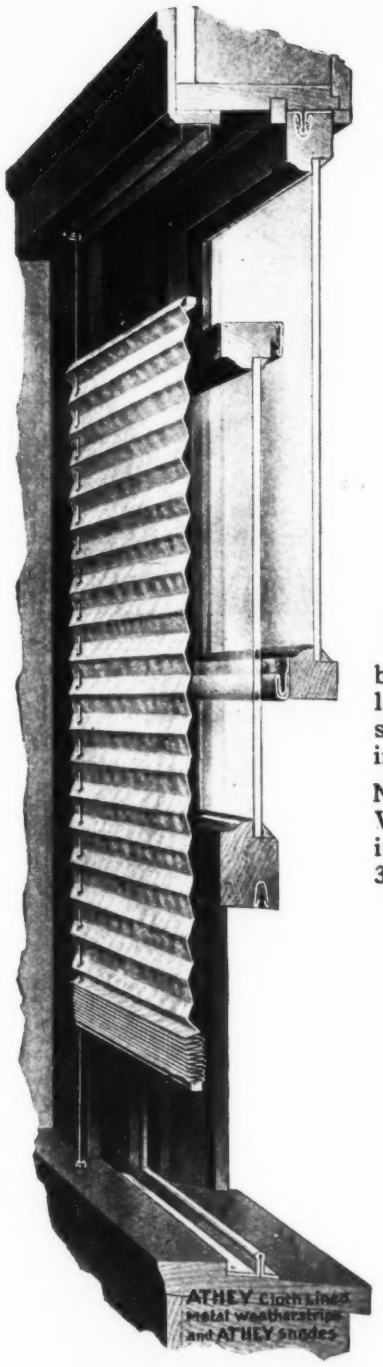
the windows are draft tight

Athey Cloth-lined

METAL WEATHERSTRIPS

Warm, comfortable schoolrooms supplied with ventilation and fresh air as was intended by the architect.

Cold floors and drafty classrooms are unhealthy and uncomfortable, and foster epidemics of all kinds. Such conditions are not at all necessary. Seldom is a heating plant inadequate when the windows are equipped with Athey cloth-lined Weatherstrips. They are not a luxury, because records show that Athey Weatherstrips usually pay for themselves in less than three years by the saving in fuel alone, not taking into consideration the saving in handling of excess fuel, or in cleaning and decorating by keeping out dust and dirt.



ATHEY Cloth-to-Metal Contact Weatherstrips

change any wood or steel window from a rattling, loose, drafty sash to one that works smoothly and quietly and is absolutely draft-proof when closed.

Why force the heating plant by trying to heat all outdoors when a simple ATHEY installation quickly pays for itself with the saving in fuel?

ATHEY SHADES

are better than ordinary SHADES and AWNINGS combined

They do not cut off the top light as awnings do and allow a great deal more shaded light to enter than ordinary shades.

Besides being the handsomest shade for any School, Office, Hotel, Hospital or Public Building, ATHEY Shades are practical as they are instantly adjustable to shade any part of the window.

NOW is the opportune time to plan to make comfortable the schoolrooms that were cold last Winter and at the same time save sufficient fuel to pay for the installation.

Numerous reports show that Athey Weatherstrips pay for themselves in less than three years. That's 33% on the investment.

Partial list of ATHEY Cloth-Lined Weatherstripped Schools and Colleges

Streator High School, Streator, Ill.
Purdue University, Lafayette, Ind.
Hamline University, St. Paul, Minn.
Harvard University, Cambridge, Mass.
New Sherman School, Cranford, N. J.
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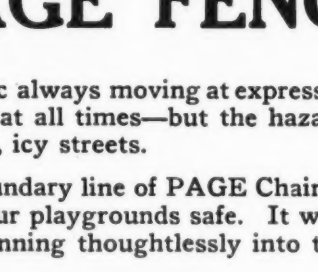
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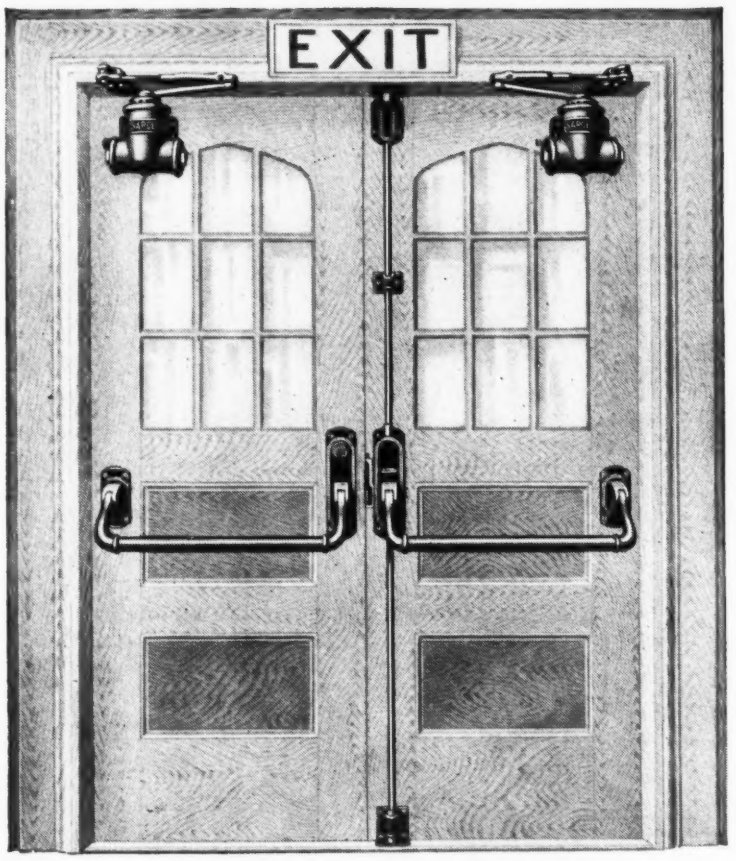
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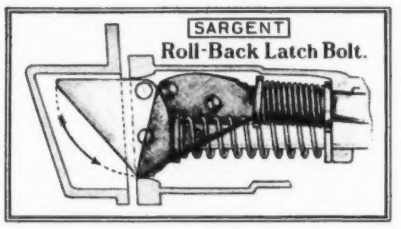


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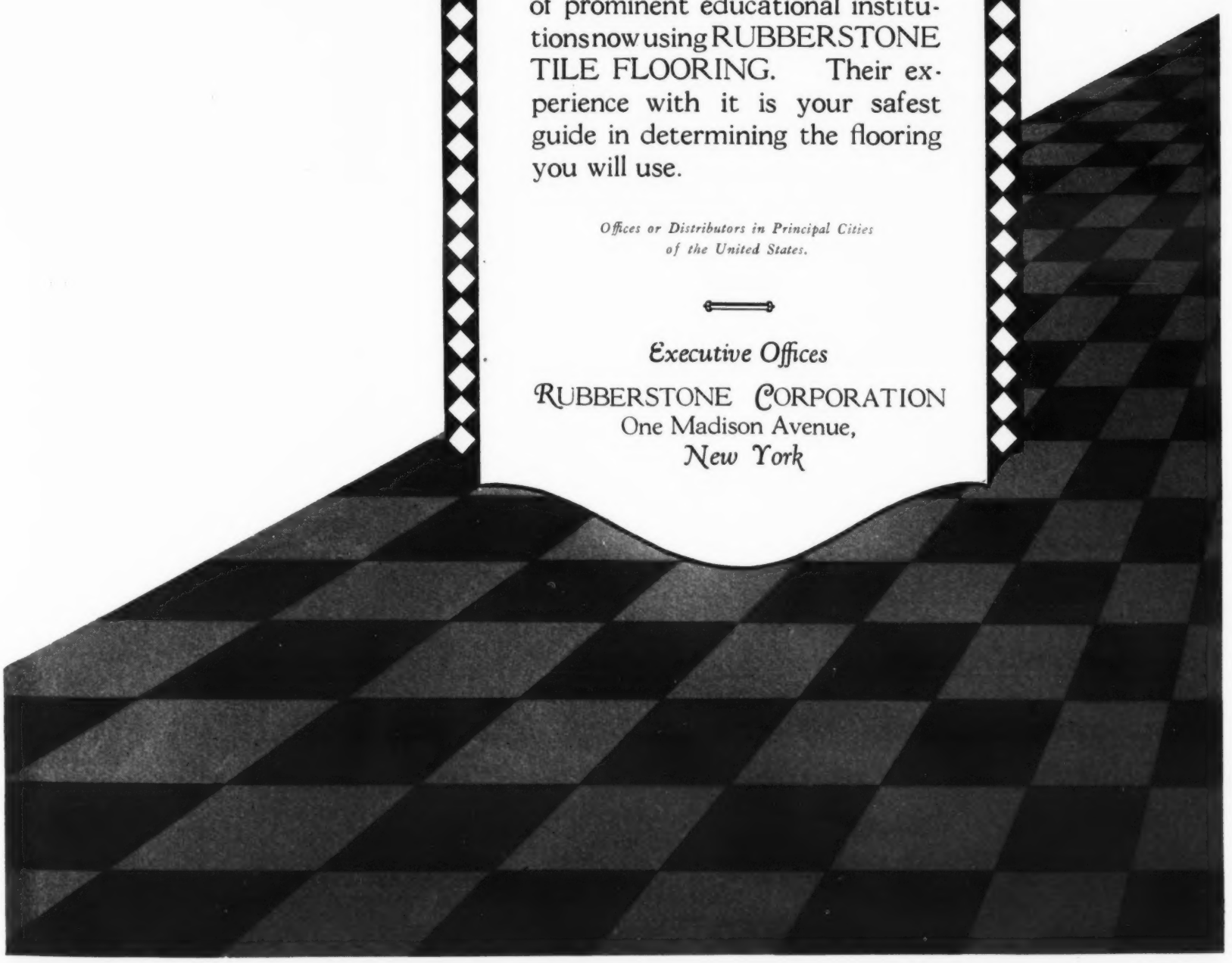
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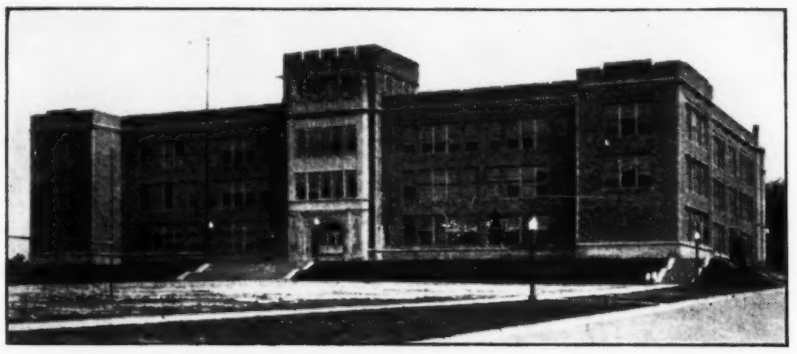
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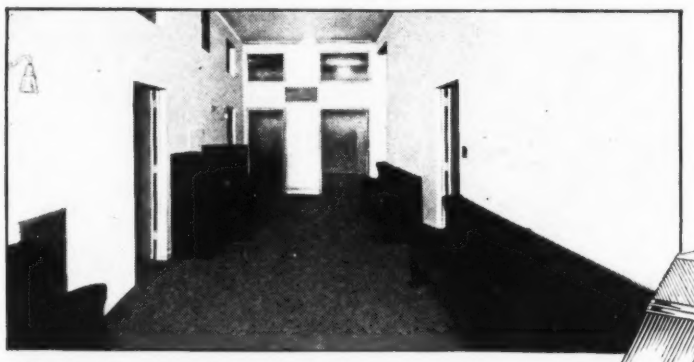
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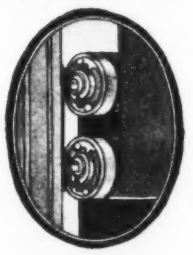
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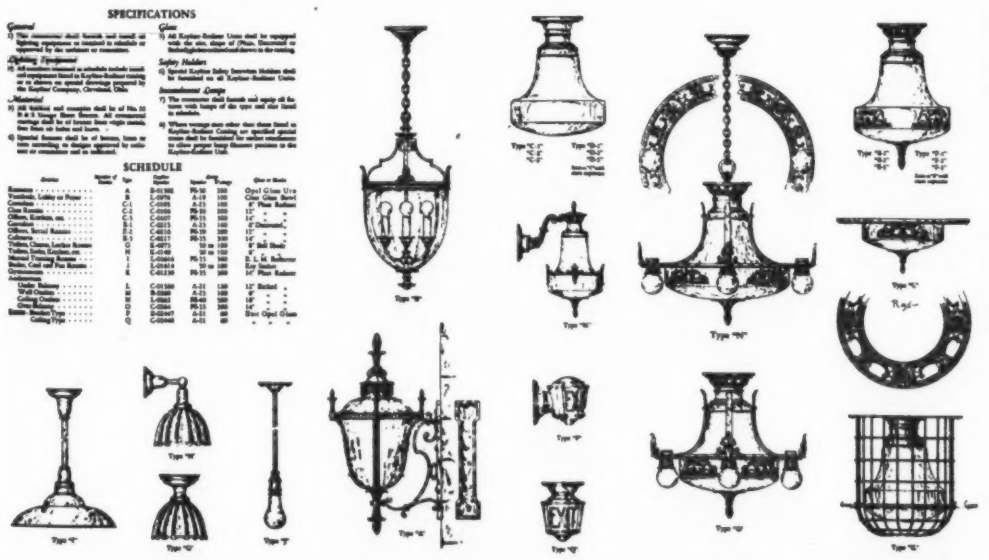
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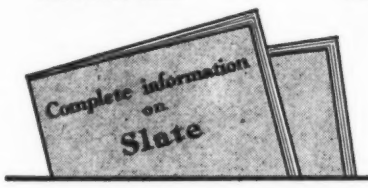
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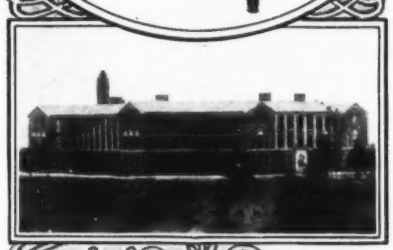

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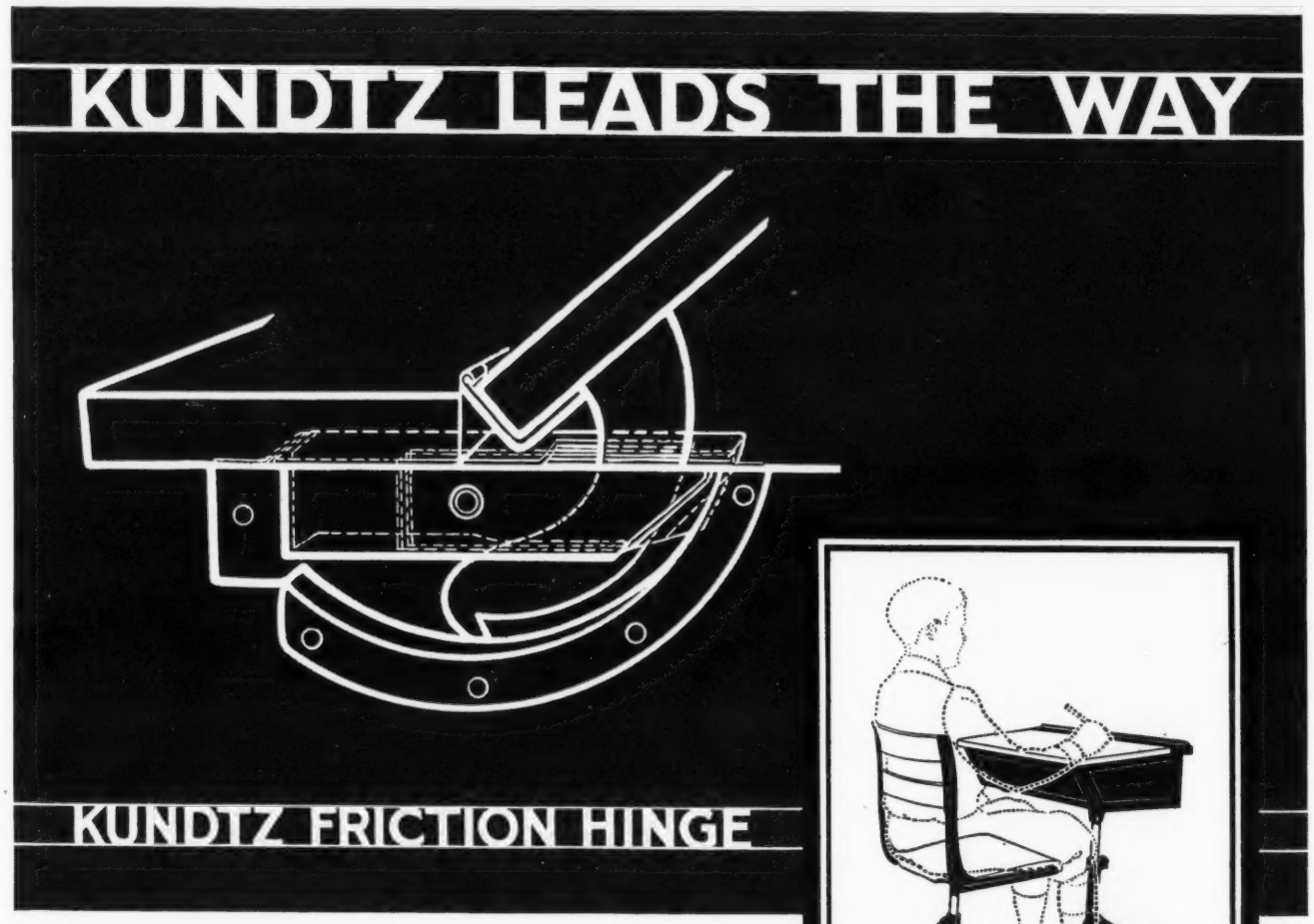
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Color finishes: Olive Green, Mahogany, and Walnut.



"Like a thoughtful Hand" — the Kundtz Friction Hinge SLOWS the Desk Lid

THE automatic friction hinge is the latest addition to the many features of Kundtz Eclipse School Furniture. It prevents desk lids from being banged down. Lessens wear and tear on desks and dispositions. Adds years to the life of school furniture by eliminating the jolts and jars that weaken ordinary desks.

The Kundtz automatic friction hinge means a **quiet** classroom; steady nerves for teacher and pupil; concentrated study.

You buy numerous other advantages in Kundtz Eclipse School Furniture. Here are three of them:

KUNDTZ CRYSTAL FINISH* is applied to the metal parts of Kundtz desks and chairs, for beauty and long life. Olive-green in color, with a non-glaring crystalline surface. Wearproof, inkproof, dustproof.

CORRECT POSTURE comes natural to the pupil who sits at a Kundtz desk. His back finds proper support in all positions; his body and mind are at rest.

ADJUSTABILITY — The newer Kundtz Eclipse models can be adjusted in a moment to the individual pupil. No fussing, no special tools, nothing to work loose.

The Theodor Kundtz Company, Cleveland, Ohio (Division of the White Sewing Machine Corporation).

Sample panel and descriptive matter gladly sent on request.

The Theodor Kundtz Company

CHURCH AND ECLIPSE AUDITORIUM SEATING

SCHOOL FURNITURE

Cleveland Ohio, U.S.A.

Peabody Designs Excel





A Complete School Line

The finest equipment for the finest schools and auditoriums. Such has been the endeavor of Peabody in the design of its complete line of school desks and chairs for every purpose. That we have succeeded is evidenced by the many Peabody installations in schools throughout the country and the modern schools and auditoriums that are now being furnished throughout with Peabody equipment.

Send for the latest Peabody catalog showing our complete line.





THE PEABODY SEATING CO.

Formerly

The Peabody School Furniture Co.

NORTH MANCHESTER INDIANA

STACKS FLAT FOR CONVENIENT STORAGE



No. 44 Swinging Slat Back

Many features developed throughout our years of experience as Folding Chair manufacturers have been incorporated in this model. It folds perfectly flat, is nontipping and will nobly stand up under severe use.

That is one of the main qualifications of the No. 44 Standard Folding Chair. As shown in the illustration to the left it folds perfectly flat. Thus quite a number of chairs can be stacked where previously there were only a few. The resultant economy of space makes it advisable to buy chairs that stack flat.

However, if you desire a chair of finer appearance there is the No. 90 Folding Chair. These chairs can be used any place at any occasion and will enhance the appearance of the room wherever they are used. Although this model does not fold flat it stacks very compactly.

Besides these two there are twelve other distinctive styles of Standard Folding Chairs each answering its purpose nobly whatever the need it is put to.

We are anxious to send fully illustrated literature. Please write.



No. 90 5-Ply Veneer

The folding chair shown above is the pride of the Standard Line. It is very comfortable, strong, neat in appearance and folds very compact. The most critical buyer will find that the construction meets his strictest requirements.

STANDARD MANUFACTURING COMPANY

Cambridge City, 1020 S. Foote St. Indiana, U. S. A.

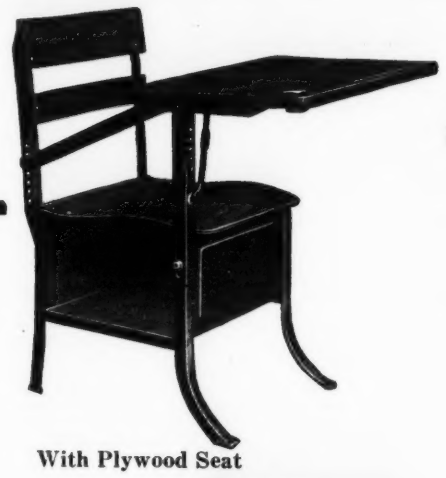
COLUMBIA SANI-STEEL ADJUSTOS COLUMBIA SANI-STEEL ADJUSTOS COLUMBIA SANI-STEEL ADJUSTOS



STANDARD INDESTRUCTO ADJUSTABLE MOVABLE DESK

Seat of standard scroll either plywood or solid at same price. Saddled seat will be furnished on request. Top of standard rectangular pattern with flush top inkwell as shown in sizes 0 to 4. Top is adjustable in height, in tilt, and has an adjustable leveling device. Wood parts are of hard maple, walnut finish. (Oak will be furnished on request.) Seven plywood top, for 20c additional. The steel parts are dark olive green. The feet are shod with gliding domes, or upon request will be equipped with floor fastenings. Steel book box as shown.

No. 330-1 and 2 @ **$5.30**; No. 333 and 4 @ **$5.15**; No. 334 and 5 @ **$4.90.**



With Plywood Seat



COLUMBIA INDESTRUCTO TABLET ARM CHAIR

No. 420

Above is an illustration of the Columbia Indestructo Tablet Arm Chair. The frame is of steel, arc welded to prevent breakage, and is finished in olive green. Back slats are of quartered oak, while the seat and arm are of plain oak or maple. Price of each $4.25; with perforated shelf $.25 extra.



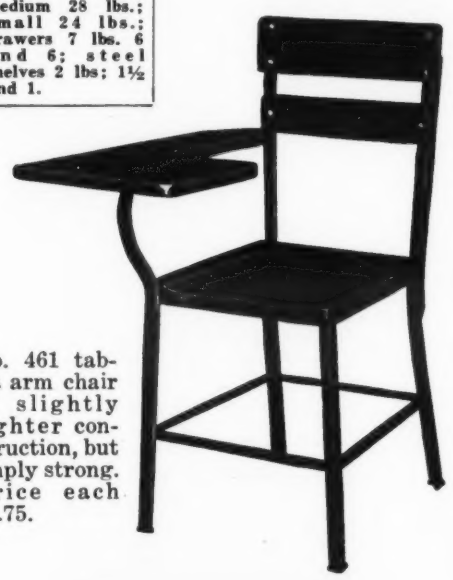
THE COLUMBIA INDESTRUCTO ADJUSTABLE MOVABLE DESK

The top is adjustable in height, in tilt, and has a leveling adjustment not possessed by any other desk. The position of the quartered oak back slats are also adjustable.

Wood parts are of oak, finished dark golden, while the steel frames are finished olive green. These desks may be assembled more quickly and more easily than the combination desks.

No. 400-1 and 2, $4.95; No. 403 and 404, $4.80; No. 405 and 6, $4.65; B Drawer, $1.00. Inkwells with steel swinging holders $0.15
Back panel above bookshelf..... .20

Shipping Weights — Large 34 lbs.; medium 28 lbs.; small 24 lbs.; drawers 7 lbs. 6 and 6; steel shelves 2 lbs; 1½ and 1.



No. 461 tablet arm chair of slightly lighter construction, but amply strong. Price each $3.75.



SANI-STEEL INSTRUCTOR'S DESKS

This desk may be had with two drawers at $13.00; four drawers at $17.00; with five drawers at $19.50. It has a steel frame and body that is finished dark olive green. The top and drawers of five-ply built up quartered oak, finished dark golden.



No. 450 TEACHERS' CHAIR

Can be used for Teachers, Visitors, Cafeteria, or the Library. Oak seat and quartered oak back are finished dark golden or brown. Has an olive brown steel frame. Priced at $2.85 each.



No. 65 STEEL BOOK CASE WITH DOORS

Impervious to rats, mice or other vermin as well as fireproof. It will keep your libraries in good condition during vacation months as well as during the school term. The shelves are of wood, for better surface for the books, and are adjustable.

Dimensions: 12 in. deep by 40 in. wide by 55 in. high, each.....$30.00



COLUMBIA INDESTRUCTO KINDERGARTEN CHAIR

Sturdily constructed with a saddled oak seat and curved quartered oak back and a solid steel frame. Made in three sizes. One dozen weigh 110 lbs. and are priced at $16.00. Also the Elementary Tablet Arm Chair at $21.00 per doz.



COLUMBIA SCHOOL SUPPLY COMPANY,
INDIANAPOLIS, INDIANA.

SCHOOL FURNITURE









The Rowles line embodies every practical type of pupil's desk, opera chair, portable assembly chair, tablet arm chair, teacher's chair, kindergarten table, kindergarten chair and miscellaneous school furniture obtainable. If you do not have our latest catalog be sure to send for a copy.

For more than thirty years the name of Rowles has been identified with good reliable school equipment. Every article we sell has been correctly designed, properly constructed and thoroughly tested so that the purchaser is assured of full value for every dollar invested. If your School Board contemplates buying new equipment it will be to their interest to obtain a quotation on our line either direct or through a local dealer or distributor.

E.W.A. ROWLES CO.

2345-2351 South La Salle Street
CHICAGO ILLINOIS

Dealers—Write for Agency; some Good Territory still open

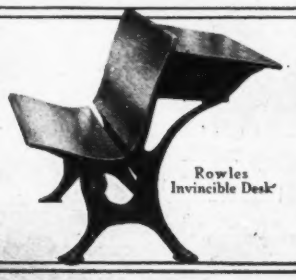














Imperial Desks
Promote Greater Teacher Efficiency

Imperial desks are noted for their consistent good quality, faultless design, and beautiful finish. They will and do make every classroom look neater. When a teacher has a desk that is spick and span in appearance, convenient in arrangement, and all drawers opening and closing smoothly, she is bound to put forth more effort for the education of the pupils in her charge. Purchase one Imperial and notice the difference.



No. 410, 54" long, 30" wide, and 30" high.

This trade-mark is your assurance of consistent good quality.

Look for this mark on all of our desks. It is your guarantee of service.



No. 409, 42" long, 30" wide, and 30" high.

The exclusive construction features make the Imperial a desk that will nobly withstand the severest usage of any classroom. School officials throughout the country, when they specify "Imperial," are positive of getting the maximum of service and satisfaction from their desks. Ask them how Imperial Desks endure.

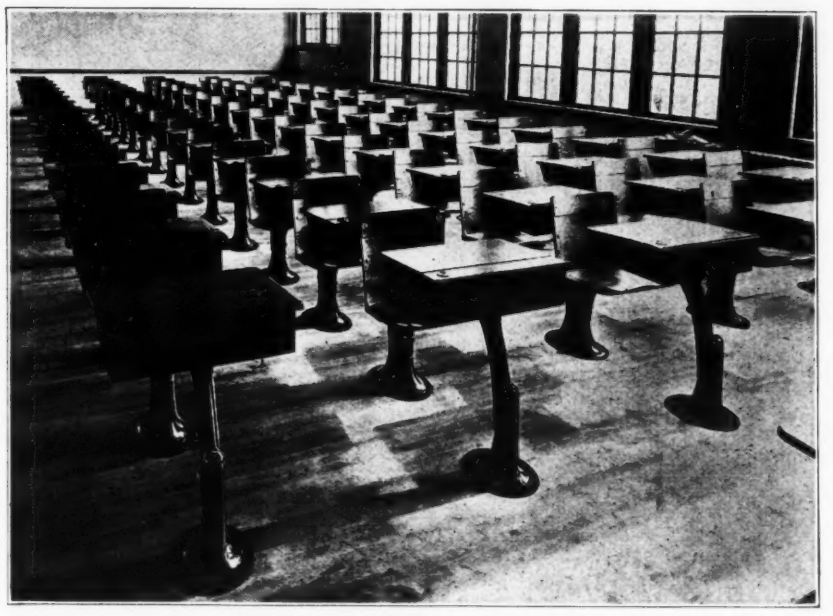
Imperial Desks are sold by leading School Supply Jobbers and Dealers throughout the country.

IMPERIAL DESK COMPANY
EVANSVILLE INDIANA

Choose Your Seating by this 10-Point Test

1. Health
2. Comfort
3. Convenience
4. Strength
5. Durability
6. Compactness
7. Lasting Finish
8. Harmonious Design
9. Simplicity
10. Sanitation

Years of collaborating with America's leading educators, together with our own exhaustive research and experiments, have resulted in equipment noticeably superior from the viewpoint of these 10 Major Tests for all School Seating. If you emphasize each and every one of these Ten Tests, your conclusion inevitably



A few of the 1400 National Pedestal Desks in the New High School, Sharon, Pa.

Leads You to National

The Most Modern and Scientific School Equipment



No. 101
Combination Desk
with Moeser Arm Top.
Standards finished in durable, baked enamel; woods, in National process finish, both in a soft brown color.

Correct posture, good health, better discipline and higher grades are dividends that prove the extra value built into National Products. All National Equipment meets this 10-point test.

The Moeser Extended Arm

This is a wonderful improvement. Available working space is more than doubled; arm is supported while writing, resulting in better penmanship with less fatigue and nervous strain; correct posture insures greater comfort and less eye strain; full support for back while writing.

All of our desks are equipped with the Moeser Arm when desired.

A wonderful new finish is now given to all National Desks and Chairs. It is ***permanently water-proof*** and ***practically scratch-proof***. Ordinary school usage makes no impression on this remarkable finish. It gives the wood a richer, deeper color and a velvety feel. This finish is both hard and elastic—also transparent. The wood takes on a soft shade of brown—very pleasing and restful. It will harmonize with any modern interior finish.

We manufacture desks of many designs. Send for our complete Catalog.

THE NATIONAL SCHOOL EQUIPMENT CO.

Manufacturers of Complete School Equipment.

PORT WASHINGTON WISCONSIN

NATIONAL School DESKS

"Famous for Comfort"

SAMSON
OFFICE TABLES DIRECTORS TABLES
TRADE MARK REGISTERED
MUTSCHLER BROTHERS CO. NAPPANEE, IND., U. S. A.

Endurance Is Built Into Them

The day is past when buyers of school office, library, and directors' tables ask for "just a table." Informed buyers now know that there is a vast difference between ordinary office tables and

Samson Tables

The difference is in the infinitely better method of Samson construction. They are built strong, rigid, beautiful, and for a purpose. That purpose is to last longer than any other table made. For that reason the underside of Samson table tops, all of which are of five-ply stock, have anchoring cleats with heavy screws to prevent warping and to hold rails and drawer slides rigidly in place. Legs are "Taper-miter-joint-boxed," to give them the same thickness of stock through the whole leg. Samson office tables don't warp or wobble. Selected wood and scientific building makes them endure for a lifetime.

When buying your next office or directors' table be particular to ask for a Samson. Look for our trade mark on the table. It is your Guarantee of Quality and Workmanship. Ask us to send you further details.

MUTSCHLER BROTHERS COMPANY
NAPPANEE INDIANA



No. 321 OAK



There is a place for the
LAW NON-COLLIDING CHAIR
in YOUR Schools

BECAUSE of the adaptability of the Law Non-Colliding Chair for use with various types of tables and desks, we are inclined to believe there are any number of places where it can be used to advantage in *your* schools. Whether you intend to purchase seating equipment for a new building or merely to replace equipment that has outlived its usefulness, we have a story for you regarding the Law Non-Colliding Chair which will prove of more than ordinary interest.

Of course the Law Non-Colliding Chair was primarily originated for use in Art, Biology, Chemistry, Commercial, Domestic Science, General Science, and Physics departments. However, it is equally appropriate for use on teachers' desks and clinic tables. In fact, the Law Non-Colliding Chair can be used on *any* desk or table which provides a minimum of nineteen inches of knee space.

We want you to know more about the Law Non-Colliding Chair and other items of general school seating which we manufacture. The benefits of our many years experience as specialists in the seating equipment field are yours for the asking — and without obligation, of course. The coupon below is intended for your convenience in writing us.

The B. L. Marble Chair Company
School Seating Division
Bedford, Ohio

The B. L. Marble Chair Company
Bedford, Ohio.

Send, us, without obligation, full information on the LAW NON-COLLIDING CHAIR and other items of general school seating.

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NORTH, SOUTH, EAST, WEST

You'll find STEEL Seating in good schools

No matter where you go you will find good schools equipped with Steel Furniture Company seating. The extra advantages to be had in Steel seating has gained the approval of school-boards who are seeking the best at a reasonable price. Steel seating is exceptionally durable, wonderfully made by famous Grand Rapids craftsmen, and designed to seat the student in a correct, healthful posture.

Steel engineers will gladly submit a sound, economical seating plan for your consideration.

Because of its many advantages and exceptional values Steel seating merits your earnest consideration. Send for Steel catalog today.

STEEL FURNITURE CO.
GRAND RAPIDS, MICHIGAN



Made in three sizes
Large
Medium
Small

No. 600, illustrating
Size "A" Desk, Open
Box Style

THE "ARLO"
ADJUSTABLE PEDESTAL DESK

The "Arlo" Adjustable Pedestal Desk is our latest contribution to modern hygienic schoolroom seating. A beautiful desk, both in design and finish, it is absolutely sanitary—exceedingly well adapted to the varying needs of any classroom and guaranteed to withstand the strenuous requirements of every type of classroom service.

The pedestal is made of semi-steel, constructed to give greatest strength at the points of greatest strain. The broad, massive base is cup shaped and when screwed to the floor will never pull loose.

The "Arlo" Adjustable Pedestal Desk will last a lifetime; has steel sides and back and the top is made from maple or birch, finished in Arlo Brown (American Walnut).

Adjustments are simple and easily made. Book box chair seat are independently adjustable. This is a distinctive feature and makes it possible to adjust "Arlo" desks to meet the individual requirements of each pupil.

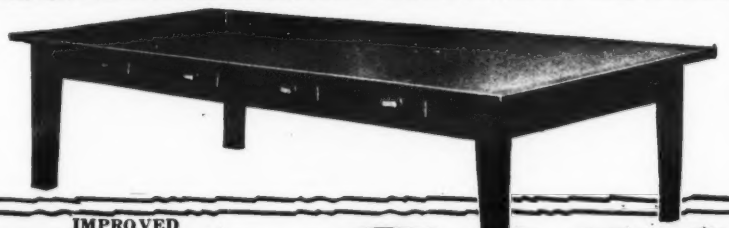
The "Arlo" Line includes The Arlo Adjustable Pedestal Desk with Study Top, The Arlo Non-Adjustable Pedestal Desk, and the Arlo Pedestal Tablet Arm Chair.

Descriptive literature and prices on request.

Flexibility of adjustments assures each pupil being properly fitted, insuring correct posture and real comfort.

Arlington Seating Company

Office and Factory **Arlington Heights, Ill.**



IMPROVED
ELGIN
SCHOOL TABLE

60 Years of Progress

IT PAYS to get inherently good furniture when you equip your schoolrooms.

The **Elgin School Table** represents 60 years of perfection in the art of woodworking. Its rigid, solid, durable construction assures you of years of dependable service.

In the development of the **Elgin School Table,** the efficiency of first and second grade rooms in schools the country over has been considerably increased. The new method of "group instruction" in these lower grades has served to speed up the work of the teachers and heightened the interest of the pupils.

Send for our booklet, "Seating Efficiency" — it will keep you posted on this better method.

RINEHIMER BROS. MFG CO.
ELGIN, ILL.



FOLDS FLAT

Now New

Peerless TUCK'ER'WAY Reg. U. S. Pat. Off. PATENTED

IN COLORS

Color is the vogue and the TUCKER'WAY has taken no back seat. It is the front row itself, for now you may have this unusually strong and distinctive all-wood folding chair in vivid red, blue and green, as well as natural (beech). And special colors on special orders.

Folding Chairs that are *different!*

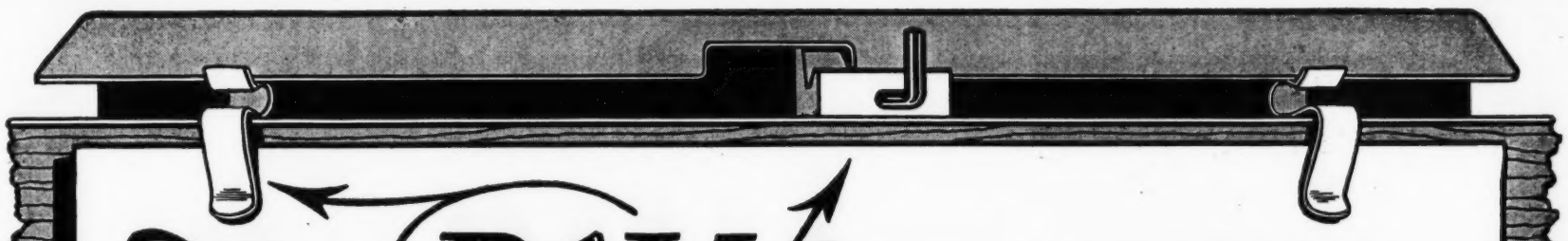
These are the chairs that are Easy to open and close (with foot). Easy to stack (stack as flat as pan cakes), and EASE-y to sit in. You can treat 'em rough. May be left out in the rain (won't turn white, warp or rust). No metal stampings to come loose or pinch the seat—"no metal to touch you." Singly or in rows. Juvenile size also.

Send for Sample Chair and Prices

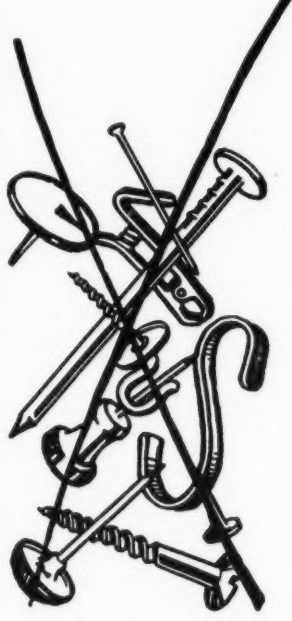
Send for sample chair (use the coupon) and inspect it for yourself. Secure quantity prices.



Tucker Duck & Rubber Co.
Fort Smith, Arkansas



The DAY has come ~makeshifts must go!



The Day Adjustable Display Rack, the modern means of hanging maps, charts, posters, and all other exhibits and materials, is winning new friends every day.

More and more are the leading schoolhouse architects specifying the installation of Day Adjustable Display Racks. They realize the fallacy of providing neat, attractive walls and mouldings only to have them quickly disfigured through the use of nails, tacks, pins, screws, and the other makeshifts so commonly used in the hanging of exhibits.

The Day Adjustable Display Rack is an attractively finished, non-rusting, Steel Rail which is nailed to the top of the blackboard moulding as shown ***at the top of this page.*** Inconspicuous and blending perfectly with any moulding, it is in keeping with the finest school interiors, and its neat fasteners (***shown in the circle***) are in sharp contrast to ugly nails and other unsightly makeshifts — No wonder school boards are turning toward the Day Adjustable Display Rack for the solution of a perplexing problem.



The hooks used with the Day Adjustable Display Rack are of two kinds—small spring clips for hanging flat sheets and sturdy hooks for supporting maps and other heavy objects. Both clips and hooks may be fixed at any position along the rack and removed with one hand in a second. They cannot wear out.



Simply insert spring clip, using slight pressure between thumb and forefinger.

The Day Adjustable Display Rack is carried in stock by School Supply Distributors throughout the United States and Canada.

Working models and detailed specifications (AIA file No. 19e3-5) of The Day Adjustable Display Rack will be sent to interested architects and school executives on request.

1. NEAT—does away forever with unsightly nails and hooks—protects walls and mouldings from holes and scratches—cannot mar exhibits.

2. SIMPLE— easier than using a thumbtack — your thumb and forefinger do the trick in a second.

3. EFFICIENT—holds firmly for a minute or a year. You can place exhibits on any wall as close or as far apart as you wish. Holds single flat sheets or heavy maps with equal ease.

4. SAFE—you cannot pound, scratch or cut your fingers while hanging exhibits or maps, and no dangerous hooks or nails remain when exhibits are removed.

5. STRONG—Scientifically designed to last a lifetime. Easily holds the heaviest maps — as many as you want.

6. LOW IN COST—bought by the foot, there is no waste. Fasteners are inexpensive and do not wear out.

J. L. Hammett Company

380 JELLIFF AVENUE
NEWARK, N. J.

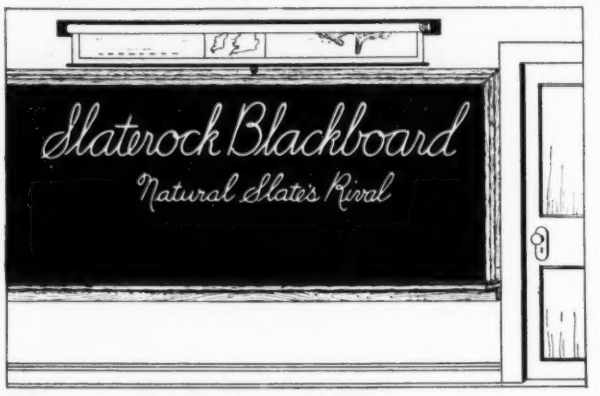
KENDALL SQUARE
CAMBRIDGE, MASS.

THE UTMOST IN BLACKBOARD SERVICE



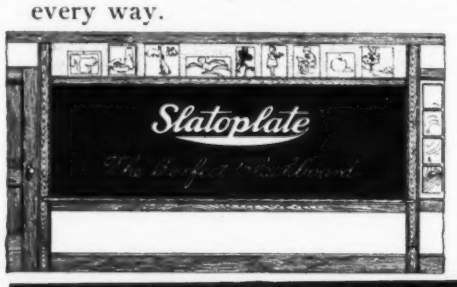
A Superior Blackboard

SLATEBESTOS has established a new standard of excellence for blackboard use. It is hard as rock and a slate black color all the way through. The surface is non-reflecting, dense, uniform velvet-smooth, and takes chalk so that it produces a clear white mark, easily discernible from any part of the room. Slatebestos is superior to natural slate in that it is more fire-resisting, costs less, is less subect to breakage, and **it actually improves with age.**



Gives Entire Satisfaction

SLATEROCK is just what its name implies: a rock core with a slate surface. It is a permanent blackboard, the life of which is measured only by the life of the school building itself. Extreme care and exacting supervision in the process of manufacture have made a superior rock into a blackboard that is supreme in every way.



Dependable — Serviceable

SLATOPLATE has proved its worth throughout the many years of satisfactory service it has rendered its many users. Built of the finest wood-pulp, it is specially treated to make it stiffer, harder, stronger, and more dependable than other boards.

Details, free samples, and catalog on request.

BECKLEY-CARDY COMPANY.

MANUFACTURERS OF BLACKBOARD AND SCHOOL EQUIPMENT

17 E. 23rd ST. CHICAGO

ROYAL SEATING

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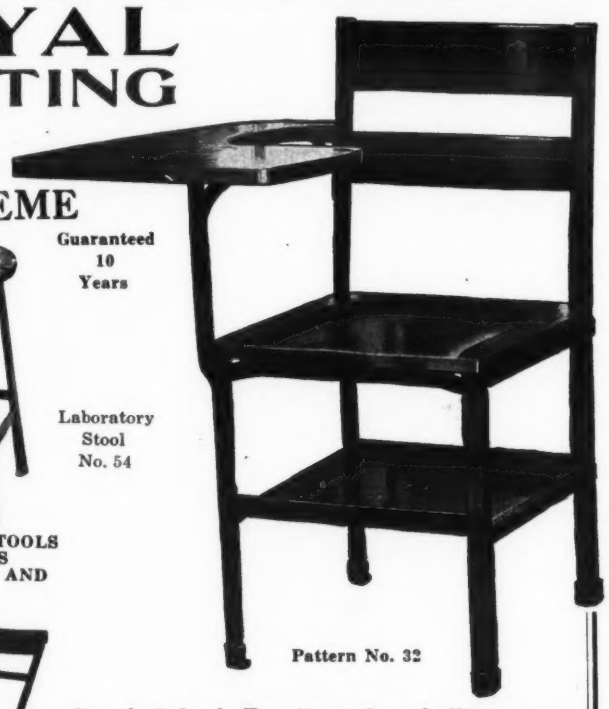
SUPREME



Guaranteed 10 Years

Laboratory Stool No. 54

LABORATORY STOOLS
FOLDING CHAIRS
KINDERGARTEN AND LUNCH ROOM FURNITURE



Pattern No. 32



Folding Chair No. 139

Royal School Furniture has built an enviable reputation for strength, posture, comfort and finish. Thirty years of experience in the manufacture of Metal Furniture and the designing of seating to meet special requirements is reflected in the superiority of present-day Royal School Furniture.

UNSURPASSED RIGIDITY — The only chair using DOUBLE RIVETED Construction.

OPTIONAL EQUIPMENT—*Drawers — bottom shelf — front, back or side panels—inkwell—wood back-rests—curved or straight front legs.*

Sample sent for FREE TRIAL.
No expense — no obligation.

ROYAL METAL MANUFACTURING CO.

METAL FURNITURE SINCE '97

1130 South Michigan — Chicago, Ill.

READSBORO CHAIR COMPANY

READSBORO, VERMONT

"READSBORO" FURNITURE — QUALITY and SATISFACTION

PORTABLE ASSEMBLY SEATING

SINGLE FOLDING CHAIRS

TABLET ARM CHAIRS

KINDERGARTEN FURNITURE



No. 1019



No. 461

SCHOOL DESKS and CHAIRS

SUNDAY SCHOOL FURNITURE

FOLDING TABLES

JUVENILE FURNITURE

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CLAIRTON, PA. — 36 Fourth St., North, Wilson Sts.
CLEVELAND, OHIO — 406 Prospect Bldg.
HOUSTON, TEX. — 1112 Preston Avenue
KANSAS CITY, MO. — 1515 W. Ninth St.
LITTLE ROCK, ARK. — New Terminal Warehouse
MINNEAPOLIS, MINN. — 708-10-6th Ave., So.
NEW YORK CITY, N. Y. — 1123 Broadway
PORTLAND, MAINE — 238 Middle Street
SAN FRANCISCO, CAL. — 601 Mission Street
SYRACUSE, N. Y. — 204 East Jefferson St.
TRENTON, N. J. — P. O. Box 507

Send for bulletins, prices, and full information.



The University Tablet Chair

No. 97 is only one of the new models of this company's manufacture and as a substantial Lecture Room Chair for students of advanced grades, meets every want. It has the new solid wood deep curved back recently brought out by the New Jersey School Furniture Co. It has unusually strong supports at the junctions of the back, seat and tablet. It is ample in size and yet compact. As a part of its cast pedestal there is an easily accessible book-holder. Its tablet brace is strong and of such shape as not to interfere with the occupant. Where possible the metal parts are held together by strong bolts in such a manner that prevent final looseness. It is sturdy, well shaped and will stand, if anything can, the hard usage of a college student. It comes from the factory of the

New Jersey School Furniture Co.
Trenton, New Jersey

ESTABLISHED AUGUST, 1870
INCORPORATED MARCH, 1886

THE IDEAL FOLDING CHAIR



Balance is an important factor in the comfort of a portable chair.

The balance of the "Ideal" is ideal, insuring absolute safety as well as comfort.

Try the balance at our expense—use the coupon!

CLARIN CHAIRS are made of steel (excepting seat and rubber floor contacts) and will not mar the finest floor nor damage the most delicate floor covering.

Clarin Mfg. Co., 2456 N. Crawford Ave., Chicago, Ill.

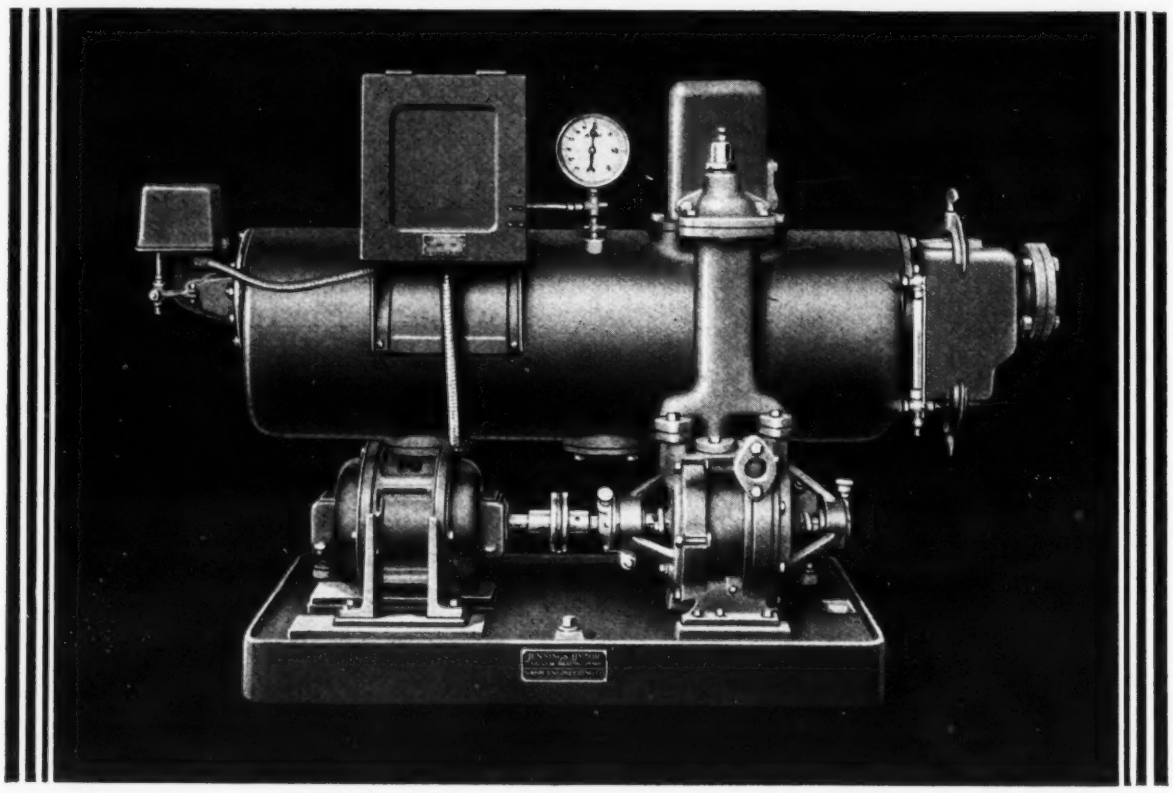
Please send by parcel-post prepaid—sample CLARIN CHAIR, finish and seat as checked:

☐ Brown (walnut) ☐ Battleship Gray ☐ Wood Seat
☐ Maroon (mahogany) ☐ Olive Green ☐ Leatherette Seat

We will either return it or pay for it after ten days' trial.

Signed .....

Address .....



Ready for the fall test

THE new term's work is well under way. Classrooms bustle with activity — pupils are applying themselves diligently — are becoming prepared for the mid-term examinations, for the fall tests to come.

Down in the basement, the Jennings Vacuum Heating Pump is also ready for the fall tests to be imposed on the school heating system by the cold weather which is coming. Ready to remove the condensation and air from the return line so that the heating system can function at high efficiency—so that it can contribute to the health and comfort of the building occupants through close control of the heat distributed.

Architects and school boards recognize the superiority of Jennings Pumps. Superintendents and janitor-engineers know from experience that Jennings efficiency assures low operating costs and noticeable fuel economies. Write for Bulletin 71.

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Mentions 225 Magazine Articles

MANY good books have been written on the subject of American school administration. But with the constant growth and expansion of educational effort, some books become obsolete, and new books must be written. Bearing this thought in mind, a western educator, of the progressive type, has for several years been at work to construct a new, concise, and comprehensive volume that should serve the modern school superintendent and those who contemplated a career in the field of school administration. An eastern publishing house recently brought out the same under the title of "Problems in School Administration." Prof. E. E. Stevens, statistician of the State College of Washington, is the author.

The book is an achievement. But why? True, the author proved himself a painstaking investigator, a methodical gatherer of facts, and an ingenious assembler of pertinent material. All this enabled him to write a serviceable book. But, there is more to say about the making of this book. A wonderful fund of material was at his command. Somebody had done some marvelous pioneering. The literature on the subject that had preceded was imbedded in numerous magazine articles and in books. It now required a guiding and discriminating mind to lift out the essential material and weld the same into a concise, logical, and complete presentation of the subject. Stevens rose to the occasion.

And here is where our own contribution to the work figures in a somewhat conspicuous way. The bibliography, which graces the book, mentions no less than 225 articles published by the AMERICAN SCHOOL BOARD JOURNAL. No other publication is mentioned one half or one third as many times. The articles cover every conceivable phase of school administrative service. Six Bruce books are also mentioned.

This remarkable bibliography, too, justifies the statement made a few years ago by Dr. William McAndrew, late superintendent of the Chicago schools, in a magazine article in which he held that the AMERICAN SCHOOL BOARD JOURNAL had made a greater contribution to the progress of the nation's system of popular education than any other medium.

The pages of this magazine have become the richest mine of thought and experimentation, as well as of knowledge, experience, and achievement, in the field of American school administration. Authors have recognized this fact.

THE EDITOR.

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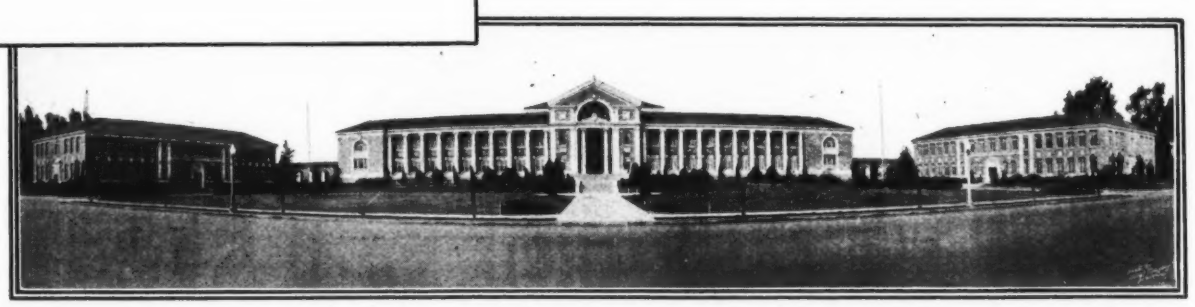
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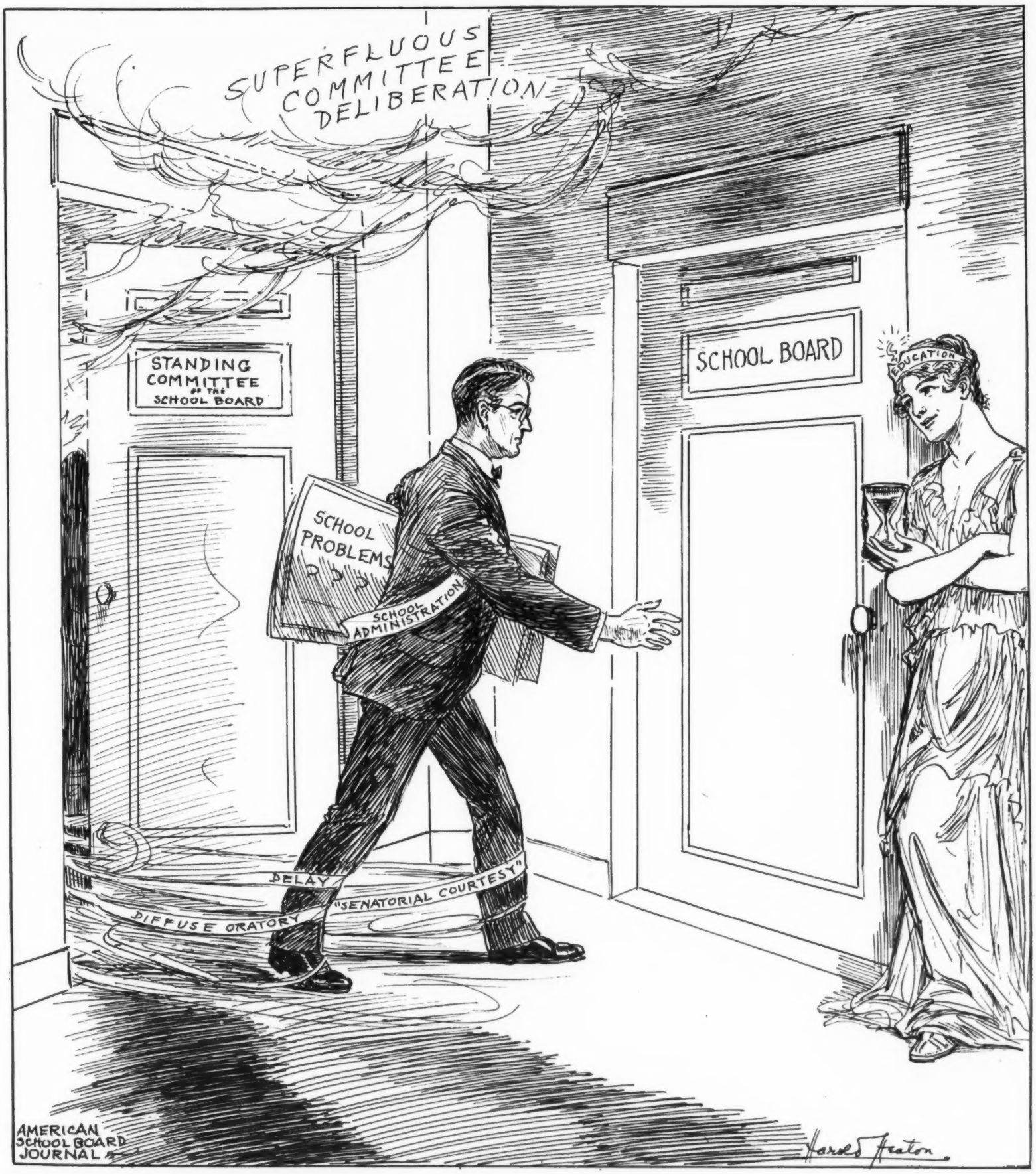
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THE AMERICAN
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Founded March, 1891, by WILLIAM GEORGE BRUCE

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Eliminating Standing Committees

"Difficulties Between Boards of Education and Superintendents of Schools"

As Viewed by a Board Member

The article in the July issue of the SCHOOL BOARD JOURNAL, entitled "Difficulties Between Boards of Education and Superintendents of Schools," presents much food for thought, but seems to be based on the premise that the difficulty always lies with the board of education and never with the superintendent. It seems to assume that the superintendent is always right. I am sure the authors did not intend it thus, or to cast reflection on the ability or motives of members of boards of education, but I must confess I was glad to turn from this questionary to the article on the opposite page, entitled, "Let Us Be Thankful." In this latter article, it is pointed out that our present educational structure is due in large part to the efforts of school-board members, past and present, that board members are in reality of the "salt of the earth."

I realize there are board members and board members, just as there are superintendents and superintendents, but I wonder if superintendents do not sometimes underestimate the value of criticisms and suggestions from the members of their boards; if they do not sometimes overestimate the value of full agreement with their own ideas and recommendations.

Try reading aloud the list of 35 difficulties found with boards of education as given in the questionary mentioned, placing the emphasis first on the word "board," then on the word "your," then on the word "you"; then honestly ask yourself if sometimes the difficulty does not lie elsewhere. Surely a board of education is not merely a necessary evil. Do you really feel that the board's only function should be to elect a superintendent, and that this duty being performed, the board should turn everything over to the superintendent and then immediately and permanently disband, or perhaps hold an organization in name only, in order to take the blame for the superintendent's mistakes or to back him up when occasion demands? Of course not. But let us not approach too closely to this condition. Let us realize that the board of education is a valuable aid, and that it is sometimes more nearly right than appears, that it is of most value, not when it passes on to the superintendent all the responsibility intrusted to it, but rather when it meets this responsibility and helps solve the educational problems of the community.

I feel this article and questionary contain much of value. Once the difficulties are found, the solutions can be worked out. So far as Group V is concerned (the group representing the larger communities), the information given in the table accompanying the article is not very helpful, owing to the fact that it is based upon replies from only twelve superintendents. But as stated in the closing paragraph of the article, such an analysis from data from the country as a whole would be very beneficial. In my judgment, such an analysis would be still more beneficial if it could be studied in connection with replies from board members to a corresponding questionary relative to difficulties which board members have found with superintendents.

For example: Question 1 suggests that the superintendent should be delegated full responsibility for the selection of teachers. Should not this delegation of power depend on whether he is gifted in selecting the best teachers available? On whether he is in any way influenced directly or indirectly by evil influences? Does he know where the good teachers are and whether they would be available in case of a vacancy in his system? Does he go in search of the best teachers available? Does he confine his selection to those who come around and peddle their wares to him? Is the selection limited to those whose qualifications are presented through agencies which receive profit from the contracts secured? Or is he influenced by personal preference, or by persons of influence in the community? Is the danger from undue influence from persons of prominence in the community less if centered on one individual elected by a changing board than if scattered over the board or committee as a whole? Is his judgment alone better than the combined judgment of himself and those composing his teachers' committee or the entire board? Is it not possible that the superintendent may be very efficient in performing the multitude of other duties intrusted to him and yet be somewhat weak in the selection of teachers? If so, should the members of the board not try to help him rather than to employ another superintendent, perhaps better in this one respect but on the whole less efficient? Is not this true in respect to many other duties and responsibilities assigned to the superintendent?

Let us look also at Question 16, which reads, "Do you find it difficult to get your board to accept the budget submitted by *you?*" Should the board always accept the budget submitted by the superintendent? Some of the board members are, doubtless, business men, with much greater business experience than the superintendent. Should not the community and the school system receive the benefit of this business experience? Is it not possible that the superintendent may be an able leader in strictly educational work and yet possess business judgment inferior to that of his board members? In such a case, what should be the attitude of the board? Remember, we are dealing with conditions as they are, not as they should be. We must win our battles with the weapons available. Conditions are seldom, if ever, ideal. Superintendents (and board members) are seldom, if ever, perfect. Should not the responsibility intrusted to the superintendent by the board depend upon his ability to meet this responsibility?

We, of this community, are fortunate in having a very able superintendent, one who has given us a school system of which we are justly proud. Every member of our board recognizes the superintendent's ability, and the value of his leadership, and I am sure his replies to the questionary discussed would indicate but little difficulty with his board. But this does not mean that he always gets what he wants when he wants it; or that he thinks his board perfect or that the board thinks him perfect. There will always be difficulties between boards of education and superintendents of schools. It is the duty of both to try to see the others' point of view, to forget personalities, to work together in harmony, and realizing the great responsibility intrusted to them, to jointly endeavor to work out a solution to all difficulties that arise.

As one who has been both a superintendent and a board member, I realize that probably the superintendent's biggest job is not to organize his school system and supervise the work of his teachers, but rather that of dealing with his board and his community. The process of educating his board is a slow one and requires patience, perseverance, and tact, and is complicated by the frequent changes in the personnel of the board. The frequency of these changes, or the evil resulting from them, is not lessened by the superintendent's "passing the buck" to his board, or laying the blame upon them for the disagreeable tasks he must perform.

If the superintendent has difficulties with his board, he will do well to analyze the situation and ascertain the reason for the difficulty. If he is fair to his board and to himself, he will probably place much of the blame at his own door. A wise superintendent will not wish his board to agree with his every suggestion. He will welcome criticism of the broadminded members of his board. He will have the courage of his convictions and not hesitate to work tactfully and persistently for the policies in which he believes, but he will not be stubborn nor officious, nor show petulance or irritation if members of his board do not at all times and in all things agree with him. He will realize that the judgment of his board, the members of which are probably leaders in the community, chosen because of their ability and integrity, may be better than his own. A great responsibility is intrusted to him. He can retain his leadership only by meriting the confidence placed in him. Boards of education will do well to give him full opportunity to prove his leadership, and to give him necessary support to carry out the program agreed upon, but in accepting his leadership, they should in no wise shirk their own responsibility.



THE EXECUTIVE OFFICES OF THE UNITED STATES DURING THE SUMMER OF 1928
The Superior High School, Superior, Wis., was used by President Coolidge's aids during his stay at Brule, Wis.

Apportionment of State School Funds

IV. The Delaware Plan[1]

Fletcher Harper Swift, Professor of Education, University of California, Berkeley, Calif.

Despite the provisions of our national Constitution and despite also the laws enacted by our various states and the rulings of our courts, public schools in the United States have always been and still remain to all practical intents and purposes, local, instead of state institutions. Many remedies have been suggested for the evils resulting from our almost universal policy of local support and local control. It is evident to every thoughtful student of school problems that the most simple and immediate solution would be to have the state take over entirely the establishment and support of the schools. Interesting precedents for such a policy can be found in the practices of the various states of Australia, in those of many European countries, and in Hawaii. But however much interest the policies of the systems thus far alluded to may arouse, to discover this policy established and meeting with success and general approval in one of our own states will inevitably much more forcibly arrest the attention of the American public. For this reason, a consideration of the Delaware plan is well worthy the attention not only of all educators and school-board members, but of all who are interested in the most economical and immediate remedy for the gross and ominous inequalities in school revenues, school burdens, and educational opportunities which exist in nearly every state in the Union.

As will appear from later paragraphs, the Delaware plan is defective at certain points. Admitting this, the fact remains that Delaware has shown that it is entirely possible in the United States at the present time to establish a state supported and controlled system of schools, and that the establishment of such a system will put an end to the evils inevitably resulting under the district and county systems of support and control. A study of such defects as appear in the Delaware plan will show that these defects are not the result of a state system of school support, but are due merely to a failure to introduce certain obvious and necessary modifications of a plan which, whatever its shortcomings, has convinced the citizens of Delaware of its superiority over previous plans under which schools were maintained.

From this consideration of the significance of the Delaware plan, attention may now be turned first to a consideration of the unique features of the Delaware system and then to a discussion of the funds of the state provided for the support of schools, and the methods employed in apportioning the same.

A "State" System

Unique features of a state system of schools. Delaware is the only state in the Union that has endeavored to organize its schools into a single state unit administered and supported by the state. As will appear later, the schools of Delaware were formerly administered and supported under the district system. For certain administrative purposes, school districts are still retained. Within the state today are found three types of school districts: (1) The city of Wilmington; (2) thirteen special districts centered about the larger towns; (3) the remaining districts, largely rural, which compose the rest of the state.

Wilmington and these thirteen special districts receive their state school moneys directly from the state and control, administer and expend the same, subject only to certain state imposed limitations which will be detailed in subsequent paragraphs. The financial affairs of all the smaller districts are managed directly by the state central office which, therefore, not only directs and controls expenditures, but actually pays all costs incurred by the individual schools.

Permissive local taxes. The law of Delaware empowers any school district, any special school district, and the city of Wilmington to levy and collect, following a favorable majority popular vote, local general property taxes for school purposes. However, since the year 1921 only two districts in the state have provided school revenues for current expenses from local sources; namely, Wilmington and Claymont.[2]

The schools of all districts other than those of Wilmington and Claymont are supported entirely by the state. It becomes evident that a study of Delaware state school funds will include all funds contributing to the support of public schools with the exception of those raised locally by Wilmington and Claymont.

Delaware's policies of school organization, administration, and support cannot be properly understood apart from a knowledge of the distribution of her population as between the City of Wilmington and the rest of the state. According to estimates of the United States Census Bureau, the total population of Delaware in 1927 was 243,000. More than one half of the inhabitants of the state, namely, 126,400, were estimated to reside in Wilmington.

The total enrollment in the public schools during the year 1926 amounted to 39,297. Of this total, 14,963 children were enrolled in the schools of Wilmington, and 24,334 in schools outside the city of Wilmington. Of the 1,433 teachers employed in the state, 511 were teaching in Wilmington, and 922 outside of Wilmington.[3]

State School Funds

Delaware maintains the following four funds or classes of funds for the support of public schools: (1) Permanent public-school fund; (2) current state school fund; (3) minor miscellaneous appropriations; (4) school-building account.

Permanent public-school fund. This fund is referred to by various titles in the school laws and public documents. However, the title provided by the Constitution of 1897, and which, therefore, may be considered the correct title is, "public-school fund."[4] The public-school fund was created by a legislative act, passed February 9, 1796, which set aside the proceeds of marriage- and tavern-license fees to be paid into the state treasury between February 9, 1796, and January 1, 1806.

Provision has been made from time to time for adding to this fund various other state moneys, including Delaware's share of the United States surplus revenue distributed in 1837. At the present time no provision is made for increasing the principal of the public-school fund, which, however, must be preserved inviolate.[5]

On July 1, 1926, the principal of the public-school fund amounted to $944,407.[6] The income for the fiscal year ending June 30, 1926, amounted to $42,602. This sum is credited to the current state school fund.[7]

The current state school fund. The laws of Delaware provide that the free public schools of the state shall be supported by revenues derived from the following sources:

1. A state general property tax. Prior to 1927 the rate of this tax was 25 cents on each $100; i.e., 2½ mills on the dollar.[8] By an act passed in 1927, the rate was decreased to 15 cents on each $100, i.e., 1½ mills.[9]

2. The income of the state school fund. Evidently the income of the public-school fund.[8]

3. The total revenue derived from any personal income tax.[8] At the present time, the state levies a graduated personal income tax of rates varying from 1 to 3 per cent.[10]

4. Income-tax filing fees. Formerly the state required a fee of $3 for filing each income-tax return. This fee was paid in addition to the total income tax levied and was in the nature of a capitation tax.[11] The entire proceeds of such fees were credited to the current state school fund. This fee has been discontinued by an amendment to the income-tax law, passed in 1927.

5. All revenue derived from any corporation tax. Every corporation, with certain specified exceptions, is required to pay an annual tax of 2½ mills upon each dollar of the actual value of its capital used and invested in the state during the preceding year.[12]

6. All revenue derived from corporation franchise taxes. Every corporation is required to pay an annual tax by way of license upon its corporate franchise, the bases and rates varying according to the type of corporation.[13]

7. Moneys appropriated by the general assembly.[8]

8. Minor miscellaneous appropriations. A study of expenditures reported for the year 1925-26 showed expenditures from minor appropriations aggregating $4,465.67, payable from state funds other than the state school funds. This aggregate sum is composed of appropriations made for specific purposes and which, because of their relatively negligible importance, will receive no further consideration in the present account.[14]

Table I presents a source analysis of the Delaware state school fund for the year ending June 30, 1926. In this table are shown the various sources contributing to the state school fund, the amount provided by each source and the per cent which such amount was of the total state school fund for the year under consideration.

State school-building account. As will appear in a later section of the present account, the state, under the present system of taxation and school support, has continued to accumulate in

---

[1]The present article is the fourth of a series of articles on state plans of apportioning school funds contributed to the JOURNAL by Professor Swift. The previous articles of this series appeared in the February, April, and June issues of the JOURNAL.

The author wishes to express his indebtedness to State Superintendent of Public Instruction, H. V. Holloway, who gave the original manuscript a careful reading and upon the basis of whose criticisms and suggestions a number of important revisions were made. The data upon which the present account is based were largely collected and organized by Mr. Bruce L. Zimmerman, Research Assistant in Education, University of California, Berkeley, California.

[2]Based upon statements received from Superintendent of Public Instruction, H. V. Holloway, under date of October 8, 1925 and May 23, 1928.

[3]Estimates of population of Delaware and Wilmington taken from *World Almanac and Book of Facts*, 1928, pp. 305 and 313. All other data taken from Delaware State Department of Public Instruction, *Annual Report*, 1926, pp. 16 and 21.

[4]*Delaware School Laws*, 1925, p. 3, sec. 2.

[5]For a more complete account of the origin of this fund see F. H. Swift, *A History of Public Permanent Common School Funds in the United States*, pp. 238-39. As pointed out in this account, strictly speaking, Delaware's share of the United States surplus revenue was not actually added to the principal of the public-school fund, but was handled in such a way as to make it practically a part of the fund.

[6]Delaware Treasurer, *Annual Report*, 1926, p. 12.

[7]Delaware Treasurer, *Annual Report*, 1926, p. 27.

[8]*Delaware School Laws*, 1925, pp. 56-57, sec. 58.

[9]*Laws of Delaware*, 1927, p. 497, chap. 158, sec. 58.

[10]*Delaware School Laws*, 1925, pp. 70-75.

[11]*Ibid.*, p. 87, sec. 19.

[12]*Ibid.*, pp. 75-81.

[13]*Laws of Delaware*, 1927, pp. 11-19.

[14]Delaware Department of Public Instruction, *Annual Report*, 1926, p. 226.

TABLE I
Source and Percentage Analysis of Delaware State School Fund. Year Ending June 30, 1926[15]

Source	*Amount*	*Per Cent*
Income taxes	$ 842,456.05	26.1
Fees for filing income tax returns	347,091.06	10.8
Corporation taxes	188 037.57	5.8
Franchise taxes	1,215,087.83	37.6
General property taxes	586,764.72	18.2
Interest on permanent funds	42,602.00	1.3
Interest on bank deposits	3,051.18	.1
Miscellaneous receipts	4,132.20	.1
Total	$3,229,222.61	100.0

[15]Delaware Auditor, *Annual Report*, 1925-26, pp. 39-40.

the state school fund a cash balance which on July 1, 1926, amounted to $1,402,652.70.[16]

As a means of devoting this accumulated state school-fund surplus to the public schools of the state, the general assembly passed an act creating the state school-building account. This act provides that any balance not to exceed $1,000,000 remaining in the state school fund after the close of the fiscal year ending June 30, 1927, shall be set aside as a special account to be known as the state school-building account. In like manner, any similar balance remaining in the state school fund after the close of the fiscal year ending June 30, 1928, shall be set aside as a state school-building account, provided that the total thus set aside for the biennium shall not exceed $2,000,000. Moneys in this account shall be devoted to school-building improvements throughout the state under conditions which will be set forth in a later section of the present account.[17]

Apportionment of State School Fund

Delaware permanent public-school fund. As indicated in an earlier paragraph, the income from the public-school fund is credited to the state school fund and apportioned therewith.

State school fund. The state school fund, which is the current distributive public-school fund of the state, is composed of the revenues presented in Table I. Although the laws provide that these revenues shall be devoted to the support of the public schools of the state, the state school fund is not immediately available for the support of schools.

The state board of education must submit biennially to the governor and the general assembly a budget of the current expenses of the schools of the state for the next biennium. On the basis of this budget the general assembly provides for an annual appropriation from the state school fund to cover the budget, or as much of the budget as the general assembly approves.[18] Table I showed that the total state school fund for the year ending June 30, 1926, amounted to $3,229,222.61. The sum appropriated by the legislature for the year ending June 30, 1926, and for the year ending June 30, 1927, was only $2,400,000.[19]

It is evident that the policy of the legislature of appropriating for the support of schools a sum considerably less than the annual state school fund must result in the accumulation of a substantial cash balance. As indicated in an earlier paragraph, this balance on July 1, 1926, amounted to $1,402,652.70.

Dual control of apportionment. The method of apportioning the annual legislative appropriation provided to cover the approved budget is determined first by the general assembly through the terms of the act providing the appropriation, and second, by policies adopted by the state board of education. The legislative act specifies a number of fixed sums for certain specified projects which must be paid from the appropriation and then further provides that the balance of the appropriation shall be distributed among the ordinary items of school expenditure such as instruction, general control, etc., on a percentage basis. The state board of education supplements the provisions of the legislative act by passing a resolution which provides bases and methods of apportioning the funds available under the terms of the appropriation act for the major classes of school expenditures. The data to be presented in the paragraphs which follow will make clear this twofold method of apportionment. The plan of apportionment prescribed by the general assembly for the years ending June 30, 1926, and June 30, 1927, is shown in Table II.

[16]Delaware Treasurer, *Annual Report*, 1926, p. 12.
[17]*Laws of Delaware*, 1927, pp. 480-81, chap. 154, sec. 1.
[18]*Delaware School Laws*, 1925, pp. 14-15, sec. 9.
[19]*Laws of Delaware*, 1925, pp. 84-86, chap. 31.

TABLE II
Distribution of Delaware State School Fund as Provided by Legislative Act for Each of the Two Years Ending June 30, 1926 and 1927[a, b]

Part I. Flat Appropriations

Purpose	*Amount*
Americanization of foreign-born and education of native-born illiterate persons	not less than $25,000
Matching the appropriation of the Federal government for Smith-Hughes vocational education	not less than $20,000
Scholarships in teacher training	not more than $12,000

Part II. Balance on Basis of Percentage Allotments

Instruction	not less than	73.5
Operation	not more than	9.0
Auxiliary agencies	not more than	5.5
Maintenance and upkeep	not more than	4.3
General control	not more than	4.2
Capital outlay	not more than	2.5
Fixed charges	not more than	1.0
Debt service	no part of the total	
		100.0

[a]This table obviously excludes that portion of the state school fund set aside as a state school-building account.
[b]*Laws of Delaware*, 1925, pp. 84-86, chap. 31.

Definition of terms. Section 3 of the act providing for the distribution of the state school fund as presented in Table II defines the terms instruction, operation, auxiliary agencies, maintenance and upkeep, general control, capital outlay, and fixed charges. For the sake of clarity these definitions are presented in the immediately following paragraphs.[20]

The practice of capitalizing these terms has been adopted from the printed act.

"The term *Instruction* shall include the following expenditures: (*a*) The supervisional part of salaries of superintendents and supervisors and their expenses; (*b*) salaries of principals and teachers; (*c*) textbooks and professional books for teachers; (*d*) supplies and other materials for instruction; (*e*) tuition paid to other boards; (*f*) other instructional costs, including summer schools.

"The term *Operation* shall include all expenditures for janitors and engineers, fuel, water, light and power, care of grounds, rent, supplies, and other operating expenses.

"The term *Auxiliary Activities* shall include all expenditures for transportation of pupils, libraries, for promotion of health and for other auxiliary activities.

"The term *Maintenance and Upkeep* shall include all expenditures for the upkeep of grounds, repair of buildings, repair and replacement of equipment, repair and replacement of apparatus, and other maintenance.

"The term *General Control* shall include the following expenditures: (*a*) Salaries and expenses of members of the state board of education and the expenses of the business office; (*b*) salaries of superintendents and their traveling expenses and the administrative part of the salaries of superintendents of special districts; (*c*) compulsory attendance and school census; (*d*) school election expenses.

[20]*Laws of Delaware*, 1925, pp. 85, 86, chap. 31, sec. 3.

"The term *Capital Outlay* shall include all expenditures for grounds, new buildings, and alterations (other than repairs), new equipment and apparatus.

"The term *Fixed Charges* shall include all expenditures for insurance."

Apportionment of Funds

Apportionment by state board of education. With the state board of education rests the responsibility of apportioning among the schools of the state the funds available for the various classes of school expenditure under the percentage distribution prescribed by the legislature. In order to carry out this responsibility it is necessary for the state board of education to formulate a method of procedure. By a resolution passed September 22, 1925, the state board of education adopted the system, set forth in the following paragraphs, of apportioning the annual appropriation from the state school fund for the years ending June 30, 1926, and June 30, 1927.[21] It should be borne in mind that in distributing the annual state appropriation under the methods outlined in the immediately succeeding paragraphs, the state board of education is making a division of funds only as among the thirteen special districts and the city of Wilmington, and the state department which administers and controls the finances of all other schools.[22]

In apportioning state funds among the school corporations,[23] the state board of education makes a separate apportionment for the following divisions: (1) The city of Wilmington; (2) each of the other special districts; (3) the state board of education. The moneys apportioned to the state board (with the exception of the definite amount allotted to the state board for general control) are for expenditures for schools located outside the special districts and the city of Wilmington, the finances of which, it will be recalled, are administered by the board. It is necessary to bear this last fact continually in mind in order to avoid the impression that the moneys apportioned to the state board are for meeting the costs of maintaining the same.

It has seemed best to present first a summary of the major steps and provisions involved in the method of apportionment adopted by the state board in its resolution passed September 22, 1925. This preliminary summary will aid in an understanding of the more detailed presentation shown in Table III.

Summary of Plan

Summary of the state board's plan. The plan of apportionment adopted by the state board provides that 4.2 per cent of the total legislative appropriation of $2,400,000 shall be distributed among the divisions[24] for meeting costs of general control. From the remainder of the appropriation shall be set aside (1) fixed amounts for five specified classes of expenditures (see Group B, Table III); (2) teacher quotas granted for every full-time elementary teacher employed in the state and ranging from $50 to $150 per teacher; (3) high-school-pupil grants of $100 per pupil; (4) the entire fund remaining, after all of the above apportionments have been made, shall be divided into three equal parts, two parts (i.e., two thirds of the fund), shall be devoted to elementary-school-pupil grants, one third being prorated on the basis of net enrollment and one third on the basis of average daily attendance.

The state board of education has recently adopted a resolution providing a new plan for

[21]Delaware Department of Public Instruction, *Annual Report*, 1926, pp. 54-56. All data presented in the remainder of the present section were taken from this source. Additional footnotes are therefore deemed unnecessary.
[22]These thirteen special districts, and Wilmington as pointed out in an earlier paragraph, enjoy a considerable degree of independence in the administration of their school finances.
[23]The official state reports of Delaware use the general term "divisions" to include the state board of education, the city of Wilmington and the thirteen special districts.
[24]For explanation of term "divisions" see footnote 23.

apportioning for the year 1927-28 the balance remaining under (4). According to the new plan, one fourth of this balance will be apportioned on the basis of net enrollment, one fourth on the basis of average daily attendance, and the remaining one half on the basis of the number of elementary teachers.[25]

TABLE III
Delaware State Board of Education Plan of Apportioning State School Fund Appropriation[a]

Group A. *General Control.* The maximum amount of 4.2 per cent (See Table I), $90,800.00 is deducted and allocated as follows:

State board	$62,500
Each special district	1,000
Each superintendent	250

Of the remainder

50 per cent on basis of total net enrollment including high-school enrollment.

50 per cent on basis of average daily attendance including high school.

Group B. *Special allotments.* The following amounts totaling $102,000 are deducted for specific purposes:

Summer-school expenses	$ 16,000[b]
Scholarships in teaching training	12,000[c]
Transportation	129 000[d]
Adult education	25,000[c]
Matching Federal aid for vocational education	20,000[c]

Group C. *Teacher allotments.* An amount is deducted which shall make it possible to allocate:

$150 for each teacher paid a salary of $850.00 or over.

$100 for each teacher paid a salary of $700 to $849.

$50 for each teacher paid a salary of $600 to $699.

Group D. *High school pupil allotment.* An amount is deducted sufficient to pay $100 for each pupil enrolled in each high school.

Group E. *Elementary school pupil allotment.* After deducting the four allotments included in Groups. A, B, C, and D, the balance is divided into three equal parts and apportioned among all the districts and schools of the state as follows:

1. One third on the basis of the net enrollment of elementary-school pupils.
2. One third on the basis of the average daily attendance of elementary-school pupils.
3. One third on the basis of the number of full-time elementary-school teachers.

For Instruction not less than	81.3	per cent of the total amount allocated
For Operation not more than	9.95	per cent of the total amount allocated
For Maintenance not more than	4.75	per cent of the total amount allocated
For Auxiliary Agencies not more than	0.14	per cent of the total amount allocated
For Fixed Charges not more than	1.1	per cent of the total amount allocated
For Capital Outlay not more than	2.76	per cent of the total amount allocated
For Debt Service not part of the total	0.00	
Total	100.00	per cent

[a]Compiled on basis of resolution passed by state board of education, September 22, 1925, see Delaware State Department of Public Instruction, *Annual Report*, 1926, pp. 54-56. It must be borne in mind as explained in an earlier paragraph that the plan of apportionment here is that provided for the $2,400,000 appropriated by the legislature from the state school fund. The method of apportioning the state school-building account appropriated from the state school fund will be described in later paragraphs.

[b]Chargeable by definition of appropriation act to instruction.

[c]In conformity with the provisions of the appropriation act of the legislature.

[d]Chargeable by terms of appropriation act to auxiliary agencies.

A careful study of the immediately preceding paragraphs and Table III shows that the net result of the major provisions thus far summarized will be merely to allocate to the city of Wilmington, the thirteen special districts, and to the state board of education for the support of schools in all remaining districts a certain sum. The plan thus far outlined gives no answer to the question how the total sum allocated to the various divisions (footnote 20) shall be expended. For example, a division will receive grants from the state fund on each of the following bases: general control, transportation, elementary-pupil grants, high-school-pupil grants, teacher grants, etc. How shall the total amount thus received by a special district or by the state board of education for all the other districts be expended? For the sake of answering this question, the board has embodied in its plan the following provisions: "Each division (i.e., the city of Wilmington, each special school district and the state board acting for all other school districts) shall be limited in the expenditure of state funds to the amount allocated thereto, for general control and for transportation, but in the expenditure of the remainder of the sum allocated, the following limitations shall be observed:

[25]Statement furnished to the Author, May 23, 1928, by State Superintendent of Public Instruction, H. V. Holloway.

Building Funds

Apportionment of state school-building account. As indicated in an earlier paragraph, moneys credited to the state school-building account are to be devoted to school-building improvements. The present plan of apportionment provides that the city of Wilmington shall receive two fifths of the moneys credited to this account, while the remaining three fifths shall be administered by the state board of education and shall be devoted to (1) the cost of administering this account, and (2) expenditures for school-building improvements in districts in the state outside the city of Wilmington. The state board is required to prepare a tentative school-building program and submit the same to the board of school trustees or to the board of education of each school district included in the program.

Compulsory district building tax. In order to share in the state school-building account, a district must contribute a sum equal to 2 per cent of the assessed valuation of the real and personal property in such district, as shown by the county assessment in force during the year 1919, provided that a district may deduct from this sum the aggregate of school-building improvement bonds issued by the district since 1900, without regard to whether any or all of said bonds have been paid.

Criticism of present plan. Delaware has much to offer in the way of suggestion and example to the other states of the Union from the standpoint of recognizing that the final responsibility for equalizing educational opportunities should be placed upon the state. The advances made by the school system of Delaware under the present plan of state administration and support are deserving of the highest praise as well as the thoughtful study of all students of public-school finance. That there are, however, many difficulties in the present system of providing and apportioning state revenues can hardly fail to be recognized by any well-informed reader. The Delaware system provides no means for insuring adequate funds for the support of schools.[26] Indeed, it leaves with the legislature the power to determine whether the moneys necessary to meet the expenditures set forth in the budget of the state board of education shall be provided. As already noted, it has been the practice of the legislature to refuse to appropriate the moneys called for by the budget despite the fact that accumulations credited to the state school fund were sufficient to do this. The scope of the present account does not permit any comprehensive criticism of the Delaware system. It has seemed worth while, however, to call attention to the situation just described. The state superintendent of public instruction in his latest report calls attention to the unsatisfactoriness of the present situation and policies in the following words:

"The fact that the sources set up for the support of schools provided a balance of $552,175.22 after the payment of the state appropriations at the close of business June 30, 1925, and that there was a total balance of $1,382,841.11 at the close of business June 30, 1926, indicates that the legislature has been quite conservative in its appropriations for the support of schools. It should be noted here, however, that this conservatism has been the cause of many embarrassments, with particular reference to the supplying of adequate textbooks and materials of instruction, and the making of necessary repairs, particularly in cases of emergencies. It has also made impossible the securing of the highest type of teachers for the schools of the state, because of our comparatively low salary schedule."[27]

In the same report the superintendent recommends "that the legislature make its appropriation for schools in accordance with the budget estimate submitted by the department to the governor."[28] It will be seen that the result of putting this recommendation into effect would be to give the state board of education the same type of fiscal independence as that which is today enjoyed by many city boards of education. Carrying out such a recommendation would undoubtedly leave the state public-school-building account without adequate funds. It was undoubtedly because the superintendent foresaw this possible situation that he recommended further that the legislature make provision for an adequate school-building program, limiting the amount therefor by a conservative estimate of the balance of funds that may be collected from the sources set up for the support of schools after first making adequate provision for the current expenses of the same.

[26]It should be borne in mind that as noted in an introductory paragraph any district *may* upon majority vote levy local school taxes to supplement its state-fund apportionment. This policy does not however guarantee adequate funds.

[27]Delaware Department of Public Instruction, *Annual Report*, 1926, p. 43.

[28]Delaware Department of Public Instruction, *Annual Report*, 1926, p. 51.

Payment of Teachers During Illness

The payment of teachers' salaries during periods of illness has by no means been brought down to commonly accepted rules or practices. Therefore, boards of education desirous of adopting some equitable method in dealing with teachers who are absent from their duties because of illness, find no particular uniformity of procedure.

Superintendent W. L. Shuman of the Mayville Heights, Ohio, schools who heads a village school district, recently gathered information sufficient to induce the board of education to adopt a definite policy on the subject. He sent out a questionary to some 40 communities, which elicited some interesting replies:

Are your teachers paid for time lost due to sickness? In answer to this question 35 answered yes and 5 no.

Is there a fixed limit to the number of days for which payment is granted? Here 29 answered yes, and 8 no. One board grants 2 days; 2 grant 3 days; 9 grant 5 days; 2 grant 9 days, and 16 grant 10 days.

How and by whom is eligibility to pay during sickness determined? The answers here were to the effect that 8 boards allow 10 days without question; in 3 a doctor's certificate determines the allowance; in 22 instances the superintendent, and 1 the board of education decides.

Who pays the substitute if one is employed? The responses to this question note that in 36 communities the school board pays and in 5 the teacher pays. The rate paid to substitutes is as follows: Grade teachers, 3 pay $4 a day;

(Concluded on Page 135)

Small-Town Essays

Fred J. Ward

ON WILLIE JONES' KITCHEN

My excellent teacher has left me. She has gone to work in Willie Jones' kitchen. It is not a temporary contract. It is permanent. Ten years would not satisfy Willie Jones. Nor would twenty years. He wants that girl forever.

I urged her not to go. For Willie Jones is poor. For all that she can tell he will always be poor. I told her that there would be children to mind, household drudgery to perform.

"You will slave away your life," I said, "in Willie Jones' kitchen."

She was indeed a talented woman. I described to her the way to a career, to future eminence. I promised fame and glory if she would stay with me.

She smiled at me through the corner of her eye. She laid her hand on mine.

"To mind those children you tell about," she said. "To hum and sing in Willie Jones' kitchen. What more could woman ask? Goodby."

And you great administrators who have colleges and normal schools under your direction; you wiseacres that know all that there is to know, take heed to this: You will always pay your tribute to Willie Jones' kitchen.

ON LITTLE SHRIMPS

The greatest authority I ever knew on history was a little shrimp. Outside the classroom he was as a child. He couldn't drive a golf ball more than a hundred yards. He didn't know how to cast for trout. If he punctured a tire on the highway he sat down and waited for somebody to come along. His students used to laugh at him, outside the classroom.

Only when he began to lecture on his chosen field did he acquire something of dignity and poise. Then you got the impression of a man who had completely mastered his subject. You knew that he had read and organized the materials until nobody knew it better than he. When you heard him talk on history you forgot his size, his falsetto voice, and the way he shook his head to emphasize an important point. His courses were an intellectual treat. His books are always being quoted.

Somehow I got his story. He went to college and got a degree. He then applied for a position in a certain high school. But when the superintendent of that school interviewed one or two candidates he selected Harvey Carter, the football star, because he figured that Harvey would impress his manly character upon the boys of the high school. The same incident repeated itself after other applications had been submitted to other applicants. Other Harvey Carters were at hand to take the positions.

Our hero stayed at the university since there was nothing else for him to do. He attained higher degrees, studied history more exhaustively. He got to helping the college professors with their examination papers. Gradually he impressed them with his knowledge. Eventually he won a place on the college staff, finally became a professor and later dean of the department.

A good many famous men have become so because of some physical handicap which has shunted them off of the competition of personality into the competition of intellect.

In the present instance, if our historian had been born to possess a degree of physical magnetism, he would have become, in all likelihood, the superficial type of good-fellow teacher we sometimes meet. As it was, he was forced to become a mental giant because there was nothing else for him to be.

And yet I don't envy him. He is such a little shrimp.

ON COMPETITION

Superintendent Livinggood got into a jam. There was nothing remarkable about his particular incident, except that this jam was a bit worse than the rest. Men in his profession given to close observation declared that it would make him lose his job before he was done with it.

I wrote to Mr. Livinggood about it. He answered my questions with his usual candor. His district had run behind financially. There were some $110,000 outstanding warrants against the district and the school board had bonded to the limit.

Livinggood had called in three experts to survey the situation. These men had advised retrenchment. Mr. Livinggood came to his trustees with a definite program. It was adopted.

The program called for the abandonment of one teaching unit. It called for fewer departments in the high school; a smaller teaching staff. This was in April, a year ago. Last fall Mr. Livinggood explained the situation fully to a group of administrators at a state convention who were gathered about the gas log in the hotel lobby.

People in the town did not take to the retrenchment which Mr. Livinggood proposed. The fact is, the only time when most of us favor thrift is when it applies to somebody else. Patrons of the school unit that was abandoned protested vigorously. Members of the high-school staff, who had been dropped, had their friends who hated to see them go. The high-school principal, whose office was to be consolidated with the superintendency, stayed in the town after he was taken off the payroll. He kept agitating the situation.

The thing turned out just as the outside observers had foretold. There was a trustee election in that town last spring. A week later it was known that there would be a new superintendent.

The news did not come to me from Livinggood. I learned of the situation from two other superintendents who had applied for his job. They wanted my cooperation in getting the place, for it was known that I was a friend of one of the trustees.

ON THRIFT

One time a hard-headed business man spoke to the parent-teacher association. His subject was thrift. Later, thrift clubs were organized in that town. Savings accounts were started in the schools. The children put their nickels in the bank.

This hard-headed business man is a splendid fellow. All of the children in the town like him because he runs one of the most attractive ice-cream parlors and candy shops in the town. He devotes hours keeping up a window display cleverly designed to catch the juvenile eye.

He spends hundreds of dollars in lighting that show window. He has expensive showcases to exhibit his wares. He once told me that he was spending 5 per cent of his gross sales in advertising. He favors classes in commercial advertising and in salesmanship for the high-school curriculum.

There may be some phases of economy which I cannot fathom. Maybe these fellows who preach thrift while organizing every force to make people spend, are setting up a sound doctrine.

Yet to the lay mind they appear as inconsistent as the hack driver Mr. Quillan told about. This driver never used tobacco in any form. He said it was a bad habit. He chewed snuff.

ON THE WILD WEST

Mr. Barklay took over a hard school and the trouble disappeared. The school he took over had the name of being a wild one. But he says it wasn't. The children had heard that they were a wild outfit so long that the thing had become a state of mind. They were like other children. They just thought that they were wild.

Discounting the fact that nothing looks hard to Barklay, there still may be something in what he says. It makes me think of the old ideas I had about the "Wild West," before I came out here.

A number of years ago some boys from my neighborhood went to the Miles City round-up. One of them entered the bucking contest and took first prize. Our boys were enthusiastic rooters. Whenever our rider stayed on a bad one the fellows would shout "Powder River," because that is where they came from.

Somehow this yell caught the fancy of the crowd. It was carried home and was adopted all over the state as the expression which best gave voice to the spirit of Montana. Montana soldiers carried the yell with them into the army, where it became a slogan of the American Expeditionary Force. I have been told that the Germans heard all about it.

This fixed Powder River as the place where things are still woolly and wild. But let me tell you a secret. Powder River is no wilder than the Musselshell, or the Tongue, or the Arkansas. It is no wilder than the school that Barklay took over. Just a state of mind, as it were, a pretty fiction.

I know what I say. I lived in that neighborhood six years. I drove by car from Ismay to Knowlton and from Knowlton to Mizpah when I left that country last spring. And the wildest thing I saw was two little fuzzy calves sucking each other's ears on the banks of Powder River.



PUBLIC SCHOOL 63, WOODHAVEN, QUEENS, NEW YORK CITY
An example of one of new type of elementary buildings for the less dense sections of the city.

The Director of Research in High-School Administration

Frank L. Eversull, Principal of the High School, East St. Louis, Ill.

The board of education and the superintendent of schools of East St. Louis, Illinois, have projected a revision of the senior-high-school program for the year 1928-29. The administration of the school passes to a new principal. The year is to be devoted to a thoroughgoing study of the high school. In order to make this work scientific it was recommended that the board of education appoint a director of research for the senior and junior high schools for the ensuing year. The board of education acted favorably upon the request and the director is on the field. The position was created to meet the request of the board of education to revise secondary education in the city and to set up a scientific program for the year. It is the purpose of this paper to outline the program which has been conceived and to set up the qualifications for the director.

I. The Program for the Director of Research in the Administration of the High School

The science of education is based principally upon objective evidence. As the data which govern school practices become objective, rules and principles are evolved for administration, organization, and supervision. Hearsay, mere opinion, and prevailing practices cannot be justified except as the science of education shows that they are right. So in order to justify the present program or to revise it, the many phases of secondary education must be subjected to the scrutiny of a scientific investigator. He must be trained in statistical, experimental, and historical research. These technics must be used in obtaining and interpreting data. As these data are accumulated and scientific interpretations are made, the whole problem of high-school administration, organization, and supervision can be placed upon a scientific basis. This is the program which is outlined for the director of research in the East St. Louis High School.

The work is planned to investigate those phases of secondary education which touch the community, the board of education, the superintendent of schools, the teachers, and the pupils. Specific problems have been set up for the director of research by the principal of the school. These have grown out of an objective survey of the high-school situation as it now exists. The director will be relieved from all other duties to spend his entire time upon the study of the suggested questions. He will budget his time so that he can work on a problem or a set of problems for a given period of time and write a concrete report and recommendations. These evidences and recommendations will be used as the basis for all reports and recommendations to the superintendent of schools and the board of education.

The Director of Research and the Community

In the East St. Louis High School there is no parent-teacher organization. Whether there is a need for one or not is not known, but it is certain that the whole problem of parent-teacher relationship needs to be scientifically studied and recommendations made as to the advisability of such an organization. If such a group is organized, the meeting dates, the year's program, the problem of administration, the aims and objectives need to be set up. The growing literature upon parent-teacher organizations needs to be canvassed and the prevailing practices of neighboring communities need to be studied. If such an organization is essential to the modern cosmopolitan high school, it is certain that one should be organized in the East St. Louis High School. The method of organization, the steps to be taken, the program of publicity, and the work for the year shall be made topics for investigation, the results of which shall be turned over to the principal for his action.

The high school can meet the educational needs of adults in the community in a number of definite ways. In many communities the high school sponsors a lyceum course. An opportunity is given for the public to visit the school through the medium of open-house programs, exhibitions, and visiting days or nights. Many organizations in the school can give pleasant and profitable entertainments, free, as well as pay entertainments. The commencement program is a part of community relation. These problems need careful study to determine the number that should be given, the nature and the extent of the programs furnished, the financial ability of the community to support these programs, the publicity program and the arrangement of dates, the justification of extra cost in lighting, heating, and janitor force, and the added burden to teachers and pupils. These community problems confront every high-school administrator and should be solved on the basis of community needs and ideals rather than upon the basis of mere past experience or community tradition.

Another phase of community relationship has to do with the question of transportation of pupils to and from school, safety problems, the factors involved in the dismissal of pupils for noon, community restaurants and lunchrooms, the behavior of pupils on the streets, and the responsibility of the school to the neighborhood. These need to be subjected to the unbiased scrutiny of a trained observer and the rules and regulations for the conduct of the school should be formulated on these evidences.

Another problem which comes up for careful investigation is the problem of athletics. In our small towns the high-school game is the essential function of the week, but in our larger towns it is only *another* essential function of the week. The relation of patrons of the community and high-school athletics should be given careful study to see if the program is at all functional and to determine its extent.

Many of the high-school publications are entirely, or in part, supported by the benefits of kindly disposed parents who include the item of advertising in their budget. Very few studies have been made of the questions involving advertisers in high-school publications. These studies should be made to determine if such advertising can be justified and to ascertain best the methods to be used by high-school pupils in soliciting advertising material. Because a man has a child in the school is no reason why his business should be bled for advertising in the school paper or school annual. On the other hand, if school advertising is justifiable for sound business purposes, efforts should be made to point out this justification.

Editor's Note: The director of research in city-school systems is a recent addition to the administrative staff of the schools. That he fills an important position is evidenced by the fact that practically every large city has found it necessary to employ a man of extraordinary preparation and of exceptional personal qualifications to fill the position.

The position of director of research in a large high school is an entirely new departure and should be watched with much interest. The position has been created by the East St. Louis board of education at the request of Mr. Frank L. Eversull, principal of the East St. Louis High School. The first incumbent of it is Mr. S. L. Osborn, who has been principal of the Wood River-East Alton Community High School at Wood River, Ill. Mr. Osborn holds a master's degree from the University of Illinois and has given considerable time in recent years to the problems of research in the high school.

The research man should also look into the matter of school parties, school excursions, the community use of the building, the community use of the auditorium, costs of the use of the building or of the auditorium or of both, and all other problems of major or minor importance where the community is directly represented by financial gift, by personal presence, or personal interest in the affairs of the school.

II. The Director of Research in Relation to the Superintendent of Schools and the Board of Education

One of the chief concerns of superintendents and boards of education is the whole matter of school costs. The director of research shall provide scientific evidence of many items of cost in the administration of the school. One of the first problems which confronts the principal is the whole problem of heat, light, and janitor service. Many items in these have accumulated from time to time, and some have long outlived their usefulness but are still continuing because no objective evidence is presented to show their failure to function. The director of research shall study the problem of lighting and heating with the view of getting maximum efficiency at minimum cost. The number of janitors in the building should be based upon the scientifically determined needs of the physical property as well as the physical ability of the caretakers. It shall be the duty of the director to study the janitor service in neighboring cities, to make a service program for the staff, and to measure and lay out a program for the cleaning and caring for the building. His studies shall be used as a basis for the hiring of custodians, directing their work, and providing them with work sheets.

The problem of costs further involves the condition of the building and the scientific study of repairs and replacement compatible with building maintenance. He shall set up standards for condemning equipment now in use and shall justify these standards by scientific procedure. This will leave little in the way of replacement and repairs to guesswork and is calculated to set up an economic program of building maintenance.

He shall study the various textbooks in use in the school so as to standardize the supplies needed in the various departments. These supplies shall be ordered upon prescribed forms in a carefully routinized way. All orders for supplies shall originate from the office of the principal and shall follow the standardized list of supplies which the director of research shall furnish. This list shall include all items of permanent equipment as well as educational and maintenance supplies.

He shall investigate the problem of night-school and summer-school advantages for secondary students with a view of furnishing to the superintendent of schools the actual needs of the community, the cost, and suggested programs for financing these.

Other items of cost concerning the work of the teacher and the pupils will be taken up later.

III. The Teachers and Teaching Problems

The research director shall study the problem of the teaching load of the school with a view of keeping it at its maximum efficiency. This shall include the number of classes that a teacher handles, together with a program of extracurricular activities, and the added burdens of taking care of problems growing out of the department in which the teaching is done.

He shall study the whole problem of equipment and supplies to see that these are kept in condition to give maximum efficiency at minimum cost. Oversupply is more pernicious than undersupply when looked at in the light of

economic consequences. His program should include the opportunity to study the question of the equipment and supplies.

A number of studies have pointed out the excessive cost of reteaching. It costs approximately $20 a semester to teach a pupil in a given subject. If student failures run up into the hundreds the cost to reteach becomes excessive. So the whole problem of failures deserves a very careful study with a view of reducing the number and preventing the waste of money now spent on reteaching.

Teachers' reports shall be standardized, and forms devised to expedite the many details of high-school procedure. The forms should be planned to promote efficiency rather than to increase bookkeeping on the part of the teachers and office staff. These reports should be made so that they can be easily checked and so that they can accomplish the purpose for which they were made with the minimum cost of time. The director of research shall make a careful study of the forms needed and shall submit these for printing. In this study, the forms of other cities shall be collected and, where scientific evidence is lacking, best practices shall indicate the procedure to be used.

He shall find out the cost of instruction by subjects and in that way attempt to remedy any situation which indicates the excessive cost per pupil per subject. This can be done only by making a careful study and requires the attention of one trained in the technic of research.

He shall list the professional books and articles relating to the various teaching positions and send to the teaching staff periodically, mimeographed lists of these. He shall cooperate with the school librarian and the public library to see that the most desirable of these books are purchased for their shelves. He shall devise plans for securing textbooks to be used in the high school. This program is to be followed where it is necessary to change books to meet the changed educational situation. Any change in textbooks should be made solely upon the basis of a scientific program and this program shall be worked out to its minutest detail by the director of research.

It is understood that this whole program is devised for two primary purposes. *First,* the director of research is to make studies calculated to keep the teachers alert to their whole instructional and professional programs. *Second,* his reports are to be used by the principal as a basis of sound and scientific organization and administration. It is understood that his functions are inspectorial. The formulation of policies belongs to the principal and the superintendent. But these policies must be based upon scientific evidence if they are to be sound. The director of research will present the evidence.

IV. The Director of Research and the Pupil

One of the first things that is needed in the local situation is a scientific testing program. At present, no standardized tests are given in the senior high school. This testing program shall include a complete program for the administration of mental tests and achievement tests. In the cases of individual pupils, aptitude tests of many kinds need to be given as well as temperament tests, health tests, physical tests, social tests, civic tests, and the like. The director of research shall outline this testing program and submit it to the principal who will organize the staff to carry it through. A list of tests shall be selected to meet the local needs and the list shall be kept up to date. The director shall provide discussions relative to the administration of tests, interpreting results and recording scores.

A second phase of pupil activity which he shall study is the whole guidance program. The director of research shall outline a program, devise the forms needed to carry it out, and suggest the machinery needed. The program shall include a diagnostic platform as well as a prognostic one, and shall be made practical from start to finish.

The local situation demands that the cafeteria receive attention. The investigation shall include the problems of menus, service, student service, cost of service, purchasing of supplies, payment of bills, and the like. The library also presents opportunities for study.

Careful investigation into the large problem of the curricular and extracurricular program shall be made. If it is true that secondary education is to concern itself, in part at least, with the larger practices of guidance, exploration, and vocational training, then these need to be considered in connection with the large opportunity for a dynamic curricular and a functional extracurricular program. This should be further augmented by the study of the vocational, the cultural, and the prevocational needs of the community. The director of research needs to go into the whole problem of vocational guidance and to present objective evidences for the reconstruction of subjects offered in the high-school curriculum.

He needs to study the whole problem of school publications to see that they meet the needs of the school, the community, and the teachers without becoming a burden to anyone. He needs to study methods of financing, the whole problem of printing, and the question of student time involved on the part of individuals who are carrying on the work. This takes us to the next step which involves the finance of school organizations. It is the business of the school to set up machinery which will prevent loose management, and this can be done best by studying the finances of the many school organizations. The director shall investigate these problems and recommend procedures.

Last of all, he shall devise methods of studying the individual pupil. After all, it is the individual pupil who comes to school to be educated. There are fundamental causes for maladjustment, which, if properly diagnosed, could be treated and the individual restored to his rightful place. The director of research shall suggest this whole problem of diagnostic and remedial procedures in the handling of pupils who fail, pupils who misbehave, or pupils who present social, economic, intellectual, or moral problems. This machinery shall have in view but one thing, and that is the restoration of the individual pupil. Here, again, he shall be guided by the scientific procedures which have been established, and he shall present the evidences and the methods to the principal for adoption.

These suggestions were made as the program was projected for the year. This has been a statement of orientation. The place is a new one in high-school administration and it is necessary to prepare plans and specifications for the job. How they work out and how the director will function in the program of reorganization can be told a year hence.

Qualifications of the Director of Research

The qualifications which are set up for such a position arise out of complete analysis of the worker to secure the adequate performance of the duties. The activities of the director of research are found to be four.

1. It is essential that he be technically trained in the three general types of research—historical, statistical, and experimental. This demands that he be trained in the science of research by having taken specific courses in these fields of scientific education.
2. Many problems are problems of administration and supervision, so it is necessary that the director be a man who has had experience in the direction and supervision of a high school.
3. Since these researches are to be made in report form, it is necessary that he be trained in the writing of a thesis or scientific report, so it was advisable that a man be appointed who has advanced as far as the master's degree.
4. Because of his contact with the community, the board of education, the superintendent, and the teachers, it is necessary that he be a man of good personal appearance and personality. This can only be determined by a personal interview and by the opinion of those with whom he has worked.

EXPEDIENCY OF SCHOOL-BOND ISSUES

The question of the expediency of bond issues as against the pay-as-you-go plan of financing new school structures has many angles which continue to receive consideration. President E. Shorrock of the Seattle, Wash., board of education, in the light of an editorial on the subject, which recently appeared in the SCHOOL BOARD JOURNAL, expressed himself as follows:

"1. In paying for school buildings immediately, taxpayers are, of course, providing facilities which will be used by successive taxpayers without cost, for a long period.

"2. In so doing they would, of course, deprive themselves of funds which would otherwise remain in their possession for personal purposes; and seeing that a community can borrow much more advantageously than an individual, the taxpayer is, in fact, obtaining a current loan at a very low rate. In other words, the contention that the payment of interest in such cases is a distinct loss, is not correct. It is payment at a very low rate, for use of funds which remain in the possession of the taxpayer. It is true that in some cases the total amount of interest paid may be equal to the principal, or even greater than the principal, but the fact remains that the outstanding funds are in the possession of the community as a whole and at a rate of interest much less than that which any individual taxpayer would have to pay for financial accommodation. Another way of regarding such interest, plus the amount of the annual bond retirement, is to regard the total as rent, which certainly the existing taxpayer should be ready to pay, but beyond which he should *not* pay.

"3. A policy of paying for buildings immediately upon their construction would often mean, because of the financial condition of a district, the postponement of buildings badly needed or curtailment of other facilities, with consequent injury to the children of the district."

President Shorrock adds the following observation:

"To my mind there is no doubt that, taking everything into account, payment for school buildings by bonds repayable by annual installments within the life of the building or buildings provided thereby, is the correct method. Take the case of this district: For a long period of years we have proceeded on this plan, at the same time retiring bonds which were previously issued on a fixed maturity basis. The amount of bonds retired up to the present time is equal to the original cost of about three fourths of our buildings, virtually all of which are still in use; and the value of the district's property as a whole, after deducting current liabilities, is about double the amount of the bonds still outstanding."

THE SCHOOL BUSINESS MANAGER

Every large business delegates some of its most meticulous workers, its keenest minds to research. The instructional side of the public schools has made an effort at research. Often the men who delve laboriously into statistics and carry on vast, nation-wide projects for new facts on education, do so without sufficient funds and without remuneration. No big business would tolerate such a situation. The public schools will do well to follow the lead of business and of the adventuresome educational researchers.—H. L. Mills, Business Manager, School Board, Houston, Texas.

The Other End of the Log

Horace Jewell Fenton, Willimantic, Conn.

It is one thing to write about teaching and quite another thing to teach. Not every good teacher can tell you in print how to teach effectively; there are plenty of poor teachers who can tell you exactly how to do it, and the most unfortunate thing about them is that they never seem to realize how widely they have missed their vocation. Perhaps I am of that class. When I review the forty years that I have spent in and about the classroom and recall how near to the edge I often traveled as a student, how joyous my own students seem to be at the sound of the recall bell; when I remember these things I feel very sure I am of that class. And that is my main excuse for daring to treat this subject, which so many of the mighty have definitely touched before. One who realizes his limitations in the practice of an art may be better qualified to point out the demands of that art than is the perfect practitioner.

If you have a pleasing personality, a magnetic something in your make-up that draws other people toward you; if you are the sort of person whom other people, especially the young, like to listen to, like to have about and to follow, then it seems to me that you possess the prime essential for good teaching, more valuable than advanced degrees, a Phi Beta Kappa key, published treatises over your signature, or a diploma, *summa cum laude,* for pedagogical study. These are mere externals; they have their use in the world, but they can never transform any colorless weakling into a dynamic force, not in a million years. Possessing these, you may, of course, have some measure of success at teaching; you may even become head of a department, who does little or no actual teaching these days, or even a college president, who seldom has direct contact with the student body; but you will never make a good teacher unless you possess considerable more than the externals. You may make a living wage out of your classroom labors, but you will not cause many men and women in afterlife to rise up and bless the time they had you in English, Latin, or mathematics.

But given a strong magnetic personality you will probably not waste your time in teaching; you will go into business or law or politics, where the possible returns for that sort of gift are so much greater. You will, unless you just naturally prefer teaching to any other calling, and the thought that you are helping youth to find the way unto salvation can compensate you for your somewhat meager financial return.

Love of Teaching

And that is another necessity for one who would be a teacher—love of the work. Of course, one will say that nobody ought to take up any labor or profession that he does not like; which is true enough, yet the world is thronged with people who, through the exigencies of fate or the lack of ordinary push, spend their lives working at tasks for which they have no yearning. They are the misfits, the round pegs trying to fill square holes, and when they get into the teaching profession it is most unfortunate.

It is unfortunate for them; it is worse for those boys and girls who must spend any part of their inspirational days under the instruction of men and women whose hearts are not in their work. Too many boys and girls pass through college, without ever having their slumbering ambitions and powers stirred to activity because their instructors regard teaching as a job, not an opportunity. Alas! where the instructor must drive himself to his task and drops it as soon as he can, you cannot expect to find his classroom charged with inspiration; you cannot expect to find boys and girls leaving that room fired with zeal for further acquisition and accomplishment. The fact that some students leave school and college, either voluntarily or otherwise, before their course is completed is no necessary proof of stupidity or of laziness. Sometimes it means that they were very unfortunate in their instructors.

While I was attached to the English department of an eastern college a few years ago, one of my associates well illustrated what I mean. He was well-read, possessed a pleasant personality, and seemed well qualified for the work except in a single particular—he had no zeal for it. He was scholarly, he was interested in feeding his own mind, but he had no particular interest in feeding the student mind. That to him was a chore. To him the profession of teaching was an opportunity to live in a cultural atmosphere, and to utilize what time he could out of the classroom for personal pleasure and profit. He taught with one eye on the clock and his mind on the next holiday. The sound of the dismissal bell at the end of recitation was as welcome to him as to any of his students. I have never known another instructor less alive to his opportunities for service, or one who kept so accurate an account of the hours before the next vacation. He left college after a year or two, and at last accounts was chasing holidays in some mid-western university where the *sine qua non* for teaching is the Ph.D.

Human Sympathy a Requirement

I doubt very much if a man like this is likely, even by accident, to arouse the slumbering possibilities in any student. The time of students spent under such a teacher is just time wasted.

If, furthermore, one would be an effective teacher, one should be blessed with at least an average amount of human sympathy and understanding. In the lower grades this means that the teacher must be alive to the countless other more or less divergent interests of his or her charges, and must sometimes regard them for the time being as of supreme importance. In the upper grades and in college it means the ability to recognize the value of another's point of view. In all grades, to put it a little differently, it means the power to recognize the existence of other interests in the world than those of the immediate present, and to realize that there are other matters of as great importance to the individual as the matter in hand, sometimes of far greater importance. The ability properly to evaluate the ideas and the interests of others and to recognize the limitations of one's own subject amid the wealth of material in the school or college curriculum—this is a rare ability among teachers.

THE SAD FATE OF WILLIE KNOTT

"Tell me your name," the teacher crooned.
"Will Knott," the laddie said.
A titter buzzed around the room,
The teacher's face grew red.

"Tell me your name," this time quite stern.
"Will Knott," the poor boy blushed.
The look in that mad teacher's eye
A mountain would have crushed.

"Tell me your name," the teacher roared.
"Will Knott," the boy replied.
A martyr's smile lit up his face
As by his seat he died.

—*Guy E. McMinimy.*

It is a very excellent test of one's broadmindedness and humanity to find oneself in error before an eager class of boys or girls. There never was such a class that did not rejoice, at least in secret, to catch the teacher in error, and every instructor knows that it will not do to make too many mistakes in the open, or he will lose his grip. Now, however, some bright student has introduced evidence into the class which, if true, completely upsets one's line of argument; what is to be done about it?

There is no question what the individual best fitted to teach will do; he will hasten to admit that he is wrong, trusting that, though his reputation for infallibility may be weakened, his reputation for honesty and frankness will be strengthened. And it certainly will be. No teacher ever yet lost anything by being honest and frank before a class. Those virtues are the marks of the superior teacher, while to beat about the bush, to becloud the matter by other issues, or to sidetrack discussion by invoking the discipline of authority—these mark the inferior person as well as the inferior teacher.

Why Men Teach

The reasons which lead men and women into the profession of teaching are many and various. Some enter it because it seems to offer at least a fair compensation, and socially it is always respectable. The profression may seem underpaid compared with the law or medicine, but it is not underpaid compared with the ministry, and as a general thing teachers are considerably better off than are hordes of people in other walks of life. Their compensation is, as a rule, regular and certain, not subject to market fluctuations, or changes in the weather, or shifts in the national political administration. A teacher may be worried over making his income meet his expense account, but he rarely has to worry about the income. Pay day usually brings a check. Hence, many men and women, moved by these considerations, have preferred to play safe with pedagogy than to invite trouble by engaging in occupations where the returns are a little less certain. Then, too, the profession is always respectable, in many localities highly so. The teacher is presumably an educated person, and learning always commands respect.

No doubt the leisure that has always been linked with the teaching profession has been a lure to many. What with the Saturdays and other holidays, Christmas, Easter, and the longer summer vacations, to say nothing of possible sabbatical years, the profession appears to make rather fewer demands on one's time, if not one's energy, than does almost any other occupation. A doctor or a lawyer of average ability is usually a very busy man; so too is the capable minister. The average business man puts in anywhere from eight to twelve hours a day, six days a week, and if he gets more than two weeks off in the summer, he feels that he is lucky. The teacher may drop his work occasionally, sometimes for rather considerable periods; he may drop it absolutely and get away from it so that he need not be bothered even by the thought of it. The doctor, lawyer, and business man can seldom do this; rarely can the minister. Wherever they go, their cases and their care follow after them.

Hence, in the matter of leisure, it would seem as though the teaching profession led all the other professions and occupations, except that of cutting coupons. It is abundantly blessed with spare time, and there is small question but that many teachers are lured into it by that fact.

The Teacher's Leisure

To many this spare time is welcomed because it allows them to carry on study and research along lines in which they are peculiarly interested, possibly to do creative work. Most of the men and women who feel called into the educational world for this reason are the scholarly minded, to whom the cloistered atmosphere and the quietness of the campus and the study have a very personal appeal, and who prefer to spend their lives in libraries or laboratories than in offices or the seething marts of trade

Much of the work which these scholarly minded teachers do outside of the classroom is ephemeral in character, that is, of no particular worth to the rest of the world; some of it, on the other hand, is of incalculable value. There is no gainsaying that fact. Furthermore, among those who have acquired fame through their productive schoolarship are numbered some of the best teachers in the land—and alas! some of the very worst.

Unfortunately, high productive schoolarship has no necessary connection with pedagogical ability. One must have some knowledge of his own and of allied subjects in order to teach affectively, but all the knowledge in the world will not make an educator out of one who has no personal magnetism, is lacking in human sympathy, and who does not enjoy the interplay of mind with mind in the classroom.

Consequently, the man or the woman who enters the teaching profession in order that he may have time for personal research does not, as a rule, make a good teacher. Such a person is not interested primarily in teaching, but in study and investigation. Teaching is a bore, a necessary evil to be endured because it is part of the contract, but the less there is of it attached to the job the better. There is both room and need in this world for the scholarly investigator, but it is sometimes unfortunate that he should be expected, or even allowed, to teach a class of undergraduates. It is often a complete waste of time for him and for them. Perhaps it should be inspirational to be allowed to sit at the foot of a scholar, on who, for instance, has assembled and ticketed all the *quod* clauses in Cicero, or who has evolved new intracies in calculus, but frequently it is not. It is not unless that scholar is at the same time a virile humanized individual, interested not only in acquiring knowledge but leading others to it.

But the teaching profession draws to its ranks not only those who are attracted by the allurements just described, but also many others who simply conclude that they will teach awhile for the lack of something better to do. In other words, the teaching ranks are padded more or less with drifters, those uncertain individuals who, having arrived at the age when they must make their own way in the world and not having discovered just what they are made for, decide to try teaching for a year or two, relying on the comfortable theory that anybody can teach who has a little more education than have those to be taught.

Thus the pedagogical ranks are swelled every year by those to whom the profession is a mere stop-gap or stepping-stone, who go into it with the mental reservation to leave it at the first opportunity who have not the slightest desire to make teaching their lifework, and to whom the very word "pedagogue" is less a term of honor than of reproach. Some of those individuals perhaps make effective teachers, but the fact that they attained high marks in school and college is no proof of pedagogical power; and as a general rule it is safe to say that the teaching average in this country is not appreciably raised by those who, having no especial yearning for the cause, are, nevertheless, willing to devote two or three years of their precious lives to it.



MR. O. S. HUBBARD
Superintendent of Schools,
Fresno, Calif.

Mr. O. S. Hubbard, formerly assistant superintendent of schools of Fresno, Calif., has been elected city superintendent of schools, to succeed W. R. Hepner.

Mr. Hubbard is a graduate of Pomona College and holds degrees given by the University of California and Leland Stanford University. He began his educational career as a teacher and vice-principal, later becoming an assistant principal, and subsequently principal of the high school. From 1921 to 1926, he was district superintendent of schools at Madera, and since 1928 had filled the position of assistant superintendent at Fresno.

Teachers Who Influence Students

It is an interesting speculation how many of the teachers that one comes in contact with while passing through high school and college are really effective instruments for molding thought and character, how many remain in one's recollections as strong vigorous personalities, and how many have faded quite away because they were in truth rather colorless nonentities who recorded marks and flunked one as the case may have been.

In a mental review of my own school days I seem to recall three teachers, and three only, who, in any real sense, were an inspiration, who led, not drove, me to the fields of knowledge. The fact that the others have largely faded from my recollection is, of course, no proof that they were poor teachers; they may have appealed to others; they may have aroused their slumbering ambitions if not mine. Still it does seem to me that if all the teachers whom I met between the ages of 12 and 22 had been men and women of strong personal magnetism, who had taken up teaching because they loved it, then more of their varying personalities would remain with me today.

Professor Dryasdust—I am referring here to a very definite individual but of another name—was the research scholar in the teacher's chair. Of his scholarship there was no question. He was a profoundly learned man, a productive scholar whose contributions to his particular science had enriched it. Foreign as well as American universities honored him with their degrees.

But Professor Dryasdust was no teacher, not as I understand the term. I do not think he enjoyed teaching. His interests were not in the crowd of undergraduates about the campus, but in the larger problems of his own field. I sat under his long nose three hours per week during my junior year at college, but I cannot now recall a single idea which I received from him in the classroom, nor do I recall that he inspired me in the slightest degree to better thinking or better living. I believe, furthermore, that he stimulated the vast majority of my classmates to about the same degree. He had a wry face that rarely smiled, a thin voice that could not be heard clearly beyond the fourth row of a large room, and a rather cold manner that did not invite confidences. I would as soon have submitted my problems to the president of the college, of whom I stood in the profoundest awe, as to have taken them to Professor Dryasdust.

To the college as a whole, this gentleman was, no doubt, a shining ornament, but in the classroom referred to above he was a dud. The precious time that I spent under his instruction, I consider was time wasted. I sometimes wonder now what the effect on me might have been had those three hours per week been spent in the presence of some virile personality that would have gripped my whole being and shaken it as every undergraduate about that time in his course needs to have his shaken. Possibly a little more magnetism with less learning might have aroused ideals and created ideas that would have had their effect even unto another generation. Who can tell?

A Textbook Referee

Tutor Quizzem held me in thrall during a portion of my freshman year. Of all the classrooms that I have ever been in, with the exception of my own, that was the very dullest. Tutor Quizzem had not the faintest conception of the art of teaching. It was currently understood that he had obtained high marks in his own college course by practically memorizing the pages of his textbooks, and because of his scholastic record had been offered a tutorship. Possibly he expected us to acquire learning in the same way for his stereotyped question in that classroom was: "Well, Mr. Blank, what does the book say on that point?"

Tutor Quizzem was no teacher—he was merely a referee between the text and student. He rarely made any attempt to explain or to amplify the text, and he did not encourage general discussion or the introduction of collateral matter into the lesson. It was his business, he appeared to think, to find out how much we knew of the assigned lesson, to mark us accordingly, and that was all there was to it. He represented the type of teacher one unfortunately meets in college and elsewhere now and then, whose single qualification for the work is a scholastic reputation, the type which is calculated to satisfy the requirement of certain colleges, notably in the mid-west, that their teachers "get a Ph.D. or get out."

No amount of college degrees, however, would ever have made an educator out of Quizzem. He was not interested in helping others to acquire learning or develop power. If he had continued in the profession, he might have made another Dryasdust, or worse, but teaching was to him merely a stop-gap, a temporary bridge to a more lucrative field. He abandoned teaching for the law after a year or two, where, no doubt, his retentive memory and his ability to stick to the point stood him in good stead.

The Genuine Teacher

Mr. Sharpe was as different from Dryasdust and Quizzem as white is from black. He was a born teacher. No college had honored him with a degree beyond the plain B.A., and he exhibited no Phi Beta Kappa key. His collegiate record had been rather ordinary. But he possessed the God-given ability to make boys and girls learn; and not only that, he inspired them with a desire to learn. He taught the two quite unrelated subjects of Greek and algebra in a small high school in New Enland, and he was master at all times of his classes and of his subjects.

(Continued on Page 135)



GENERAL VIEW OF THE SCHOOL ADMINISTRATION BUILDING, BERKELEY,CALIF.
James W. Plachek, Architect, Berkeley, Calif.

THE SCHOOL-ADMINISTRATION BUILDING OF THE BERKELEY, CALIFORNIA, BOARD OF EDUCATION

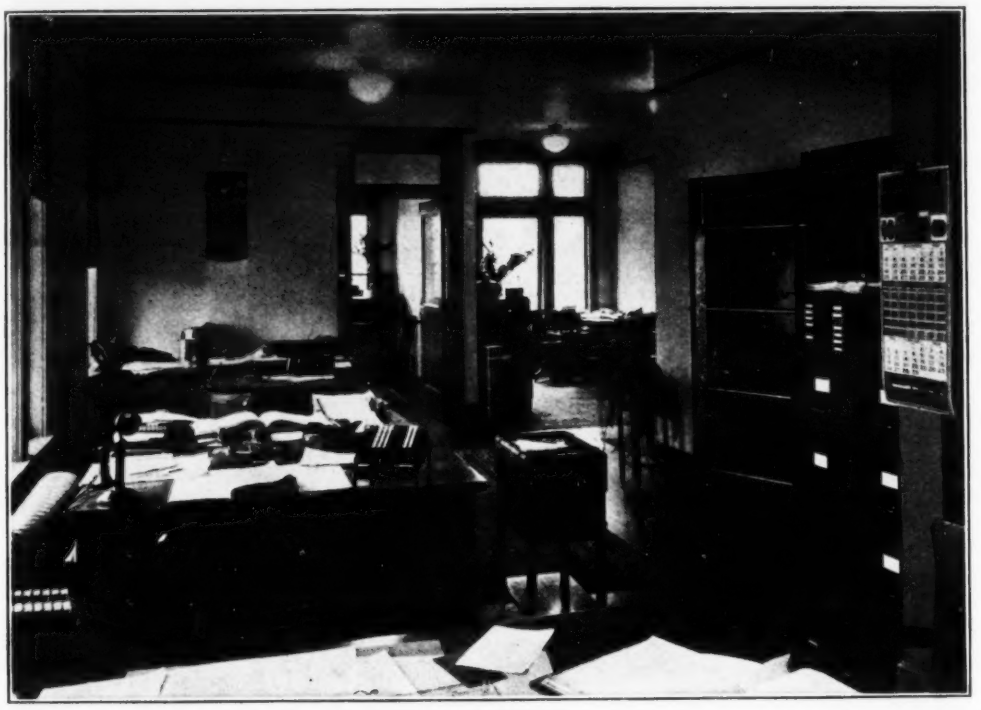
Efficient Administration Headquarters

The evolution of administration headquarters of city boards of education forms an interesting sidelight on the development of city-school systems. When schools were comparatively simple and when the superintendent was little more than a principal, teacher, and school clerk, a single room with a desk, a large table, and perhaps a safe, sufficed to meet all the needs of a city-school system. For a time it was the custom to locate the school administration headquarters in the city hall or town hall, and this practice was due in large part to the fact that the schools were considered a branch of the city government and should be near the center of authority where the city fathers could keep an eye on the school board and the superintendent. A later development placed the school-board offices in a high-school building because the high school was the pride of the community, and a high achievement of the school system. The present tendency is to place the administration headquarters in an independent building, convenient of access to the entire community, and planned and equipped for the complicated, extensive, and growing group of school executives and administrative experts who organize and plan schools, who control the school plant, who supervise instruction, and who keep the records and accounts. The room of the board of education, from being the only room in the school headquarters, has become only a very small fraction of the entire plant.

The new administration building of the school board at Berkeley, Calif., is a fine example of a building in a medium-size city that meets all the needs of a growing school system. This building was completed in the fall of 1927 and has given splendid service during the first year of its occupancy. It is centrally located and readily accessible from all parts of the city. The exterior is very simple and economical, and rather dignified with its cut-stone foundation,



INTERIOR VIEWS OF THE SCHOOL ADMINISTRATION BUILDING, BERKELEY, CALIF.
LEFT: Superintendent's Office. RIGHT: Board Meeting Room.



GENERAL SECRETARY'S OFFICE, SCHOOL ADMINISTRATION BUILDING, BERKELEY, CALIF.

light brick walls, and a cast-cement ornament.

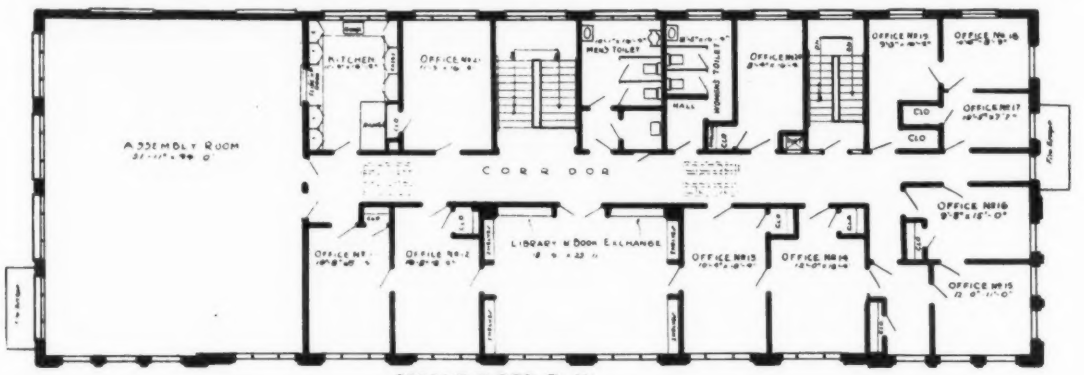
The ground floor is given over to the school-supplies department, and contains two large rooms for the storage, preparation, and shipment of school equipment and supplies. A small room is set aside for storing expensive breakable apparatus, etc. Flanking the front entrance there is space for the telephone operator and a small room for the handling of mail. On the other side of the stair lobby there is a special office for the attendance department, a vault, toilets, and an office for the shipping clerk complete the list of rooms.

The first floor is given over to the main administrative offices of the school system. The business department occupies a large office with several workrooms and small special offices on one side of the floor. The superintendent and his assistants occupy a suite of offices at the other end of the building. There are small conference rooms, toilets, and restrooms on this floor. One of the office rooms serves as the meeting room of the board of education.

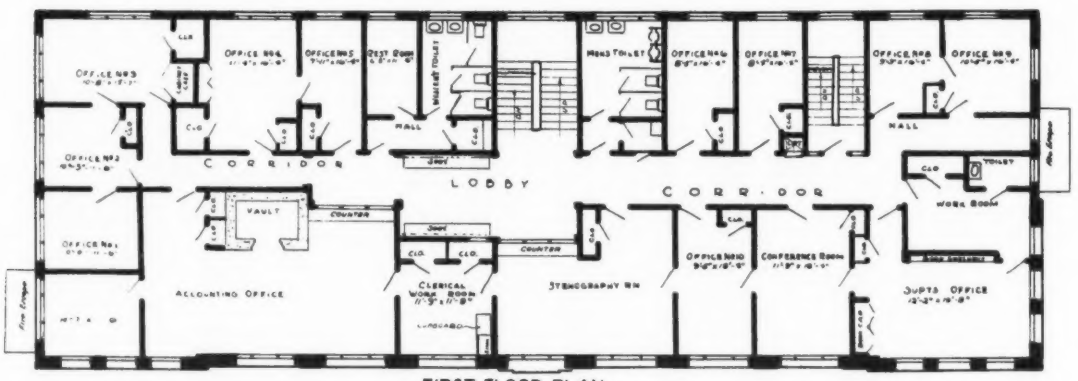
The second floor is occupied in large part by the offices of the several supervisors and directors of special subjects. One room is occupied as a professional library and a large room is set aside for assembly purposes. This room is fitted with movable seating so that it can be adapted to various group meetings, committee meetings, conferences of teachers, supervisory and administrative conferences of principals, etc. When the board of education has public meetings at which it is expected that hearings will be held, it holds its conferences in this office.

The building has been equipped in simple, attractive, but rather economical style. All the bearing walls throughout are brick. The floors and the wood trim are of California white pine, and the exposed trusses in the assembly are also of white pine. The walls and ceilings throughout are plastered and the toilet rooms are finished in tile. The building is heated throughout by steam.

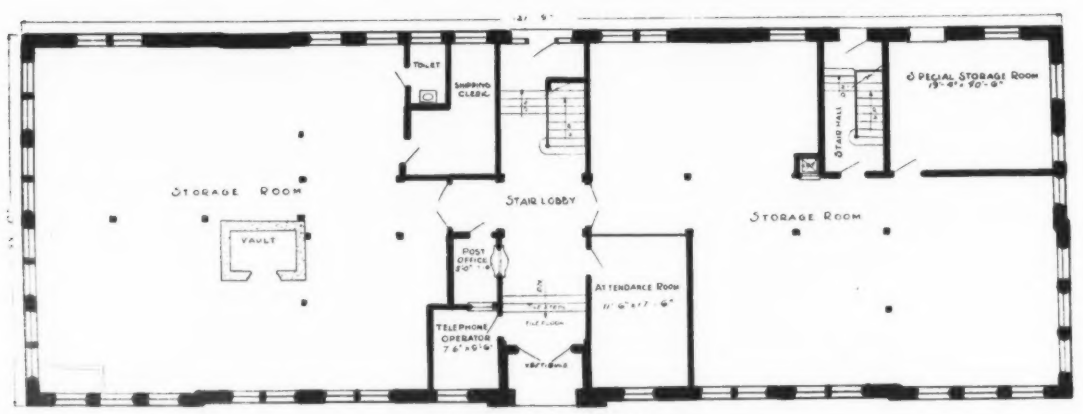
The building cost $62,994.22, not including architects' fees. On the basis of the cubic content the cost was 26 cents. The general requirements for the building were prepared by former Supt. H. B. Wilson and members of the administrative staff. The building was planned and constructed under the supervision of Mr. James W. Plachek, architect, of Berkeley, Calif.



SECOND FLOOR PLAN



FIRST FLOOR PLAN



GROUND FLOOR PLAN

SCHOOL ADMINISTRATION BUILDING, BERKELEY, CALIF.
James W. Plachek, Architect, Berkeley, Calif.

KEEPING SCHOOL BUILDINGS CLEAN

The school authorities of Hamtramck, Michigan, have given careful study to the matter of facilitating instruction through cleanliness in school buildings. A system of periodic inspection has been inaugurated and a building rating sheet has been provided.

The items which are rated are entrances, grounds, corridors, stairways, classrooms, windows, curtains, toilets, showers, storage rooms, furnace rooms, basement rooms, and fan room. These ratings are noted on the basis of good, fair, and poor.

Realizing that the demand for cleanliness involves definite standards to be observed in the several school buildings, the board of education has formulated a set of directions. These are discussed by A. C. Lamb and presented in the school bulletin issued under the direction of Superintendent M. R. Keyworth. In fixing standards for the cleanliness of buildings and grounds, the amount of work required of custodians is arranged in units. The unit for buildings is based upon 100 sq. ft. and on grounds upon 2,000 sq. ft.

Standards to be Observed

The rules placed before the custodians embody the following conditions:

1. Sweeping

a) Sweeping should be done with sweeping compound and floor brushes composed of Chinese or Russian bristles, horse hair and fiber, the outer bristles of which are at least four inches long. Each sweeper should carry a counter brush for chalk trays, under radiators and for places inaccessible to the floor brush.

b) All classrooms, special rooms, clinics, toilets, restrooms, and offices must be swept once daily.

c) Corridors, stairways, and entrances must be swept at least twice daily and in some instances four times daily, depending on the amount of traffic, the weather, and the conditions of the ground adjacent.

d) Corridors covered with linoleum should be swept and immediately followed with an oil duster. Corridors should be mopped once each month and where covered with linoleum the mopping should be followed by waxing at least once a month and in cases where there is an excess of dirt and sand carried in by the children's shoes, mopping and waxing should be done every two weeks.

e) Where buildings are used by day classes and also evening classes the sweeping should be done after the dismissal of the evening classes. However, any paper on the floors should be removed and the rooms left in a neat condition for the evening classes.

(Continued on Page 131)

Athletic Problems in Educational Administration

J. H. Holst, Montana State College

Interscholastic and intercollegiate athletic contests have, in this early twentieth century, attained a more general acclaim than was ever accorded to the gladiatorial combats of ancient Rome, or to the bullfights of modern Spain. It is interesting to note that the daily press is beginning to compare the American stadia gatherings to "Roman holiday crowds," and to speak of modern "gladiatorial" contests on the football field. Back of the contest is the mob mind which the thinking man condemns in private, but, as a member of the crowd, rationalizes for the sake of conformity.

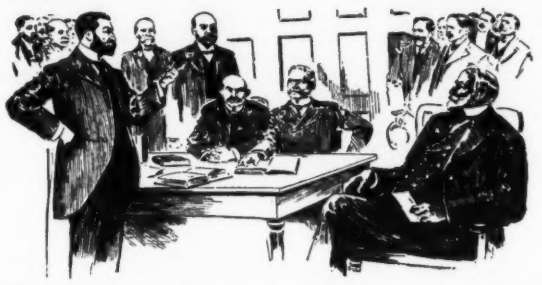
The cause of the popularity of athletic contests is found in the instinctive drives back of them. Worship of physical size, strength, and prowess won a place in man's equipment while he still carried a club and used teeth and nails in combat. This insures an audience for the would-be hero who enjoys the primitive thrills. Athletic training is, therefore, the easiest form of training, because it uses the individual equipment as it finds it, and goes on its own motive power. Such training is a comparatively free development, while education is usually handicapped by the necessity for inhibiting or redirecting certain tendencies as well as for developing others. Nonparticipants are gathered into "pep" meetings and exercised under emotional appeal. "College spirit" is perverted to team loyalty only. The alumnus goes out with the idea that his loyalty to Alma Mater is measured by his interest in her success upon the athletic field. The press, reacting to public interest, reacts upon public interest to magnify the importance of the physical contest over educational activities. The high schools draw their teachers from the colleges where they have been inoculated with the virus of pure contest, and such teachers continue to foster it in the schools that feed the college.

The contest problems of the college and the high school are somewhat different, but the close relation existing between the two institutions make for mutual interests in the matter.

Every sincere educator must agree with the assertion that physical and health educations are just as essential as the intellectual; that each depends upon the other for its full fruition. Any program of physical education must take account of health values to be attained through diet, personal hygiene, corrective gymnastics, and recreation. It must promote all-round bodily development approaching, but not overreaching, the limits set by inheritance, in order that the body may be the willing and efficient servant of the man. It must enlist the interest of all who need it rather than of the few who need it least.

The Demand for Contests

It must be admitted that there is a well-defined demand for interschool contests. The drive of instincts with their emotional concomitants is back of it. We are so constituted that we enjoy contests for the sake of contests, either as participants or as onlookers. The entrancing elements of chance are in the contest directly and in the betting on the contest. When the contest impulse is augmented by frantic appeals for "school spirit" in ten thousand educational institutions throughout the land; when newspapers "scarehead" school-contest news, and give as much prominence as murder and banditry, then are multitudes drawn to the clamor for contests, and the frenzy of a war situation exists. It is then as dangerous for the schoolman to oppose the dominance of the contest as it was in the war years to fall under the taint of pro-German or pro-English sentiments. But the



fact remains that a well-refined demand is not alone a sufficient justification for the stand taken by those who are responsible for educational administration. The demand may be that of uncontrolled emotion rather than of reasoned procedure. The educational press should be as free, frank, and sincere in the discussion of school-contest problems as the secular press has been during the past few years. The main problems must be recognized and discussed without recourse to a rationalized justification of custom and precedent. What, then, are the major problems?

First. The membership of the team is confined to the few who are by nature physically superior. The schools and colleges select the more promising from the available material. Those selected are early subjected to gruelling tests that eliminate all who do not meet the coach's standards. It is altogether a matter of selection and trial by ordeal. All argument, then, that urges the values of physical education as a justification for competitive athletics is mere academic sophistory. Those who should receive the theoretical benefits are denied the opportunity.

The Danger of Overstrain

Second. The few are overtrained and overstrained. As a result, the best athletes only too frequently break down at a time when they should be most fit. The number of outstanding athletes whose demise after leaving school would be noted in the national press is not great; yet observe how frequently such reports occur. Does anyone who has ever witnessed the finish of the 220-yard dash or other equally gruelling event in an interscholastic contest believe that those who have given every ounce of their strength can ever be the same strong men again? They may have sacrificed years of life for the thrill of a victory. Prominent writers have recently called attention to the baleful effects of overstrain, but a really scientific investigation of the subject would be valuable at this time.

Third. Competitive athletics are neither productively valuable nor socially useful except as they add to the ever-increasing army of professionals who must strive to extend an expensive and destructive activity in order to provide places for themselves and for others who are like disposed. But there is a positively disastrous effect upon student bodies and the people in general who become habituated to play by proxy, and that without the responsibility of participants. The most hopeless "fan" is the one who seldom or never plays, but gets his thrills vicariously.

Distraction from Schoolwork

Fourth. Interschool contests, which appeal so strongly to the primitive instincts and emotions, both of participants and of onlookers, set up a condition of distraction which nullifies the work of instruction and inhibits student effort. "Pep" meetings are held before the game to work up "school spirit." The stay-at-homes are urged to follow the game and send telegrams of encouragement to the team. The departing team must have a send-off and the returning team a welcome. Victory means a rally, and defeat means gloom. During the season, which is frequently coterminious with the school year, emotional excitement prevails; yet it is generally conceded that strong emotion is detrimental to mental effort and intellectual achievement.

Fifth. At first the team was selected by the coach from the physically strongest available material. Then the quest for men began to lead him farther and farther afield. Rival schools bid against each other. Bribes and subsidies, usually in the form of overpaid jobs, trivial but well-paid sinecures, or the remission of fees, were the attractive baits used. Now the country is annually scoured by athletic touts, and no man who has won a place on the local sports page while in high school need fear that he shall fail to get a chance to win further applause. And school loyalty is usually easily transferred by the athlete from one school to another, if other conditions are favorable. Within the past few seasons a certain state college sent out a letter to all high schools within the state asking the principals to report the names of seniors who had good athletic records. Such students were not only invited to come to college, but the employment agencies of the institution made it worth while for them to do so. A state university awarded a valuable scholarship to a high-school athlete who had a poor scholarship record, and that over the application of a boy from the same school who was a leader in nonathletic activities and stood first in scholarship. These are not isolated cases but serve as instances of a general practice. Interscholastic associations striving to function honestly are still unable to reach numerous reprehensible practices which hide behind a "gentleman's agreement."

Winking at Dishonesty

Sixth. Many colleges and high schools countenance the breaking of the moral code of honesty and square dealing by the most insidiously effective means. Not only do they wink at bribes and subsidies to secure players in violation of the regulations of athletic boards of control which they are pledged to support, but they allow under-cover provisions to be made for the support of athletes at the expense of other students, when both faculty and students know of the dishonesty and discrimination practiced. A case in point is that of a college which levied a $3 towel fee on all students. Then a needy athlete could wash a few towels in the gymnasium for a month's expenses, or he could have some impecunious student do it for him without forfeiting any considerable part of his gratuitious income. Not only did the students know that the college sanctioned the principle, something for nothing, but the injustice of discriminating against students with worthy objectives was equally apparent to them. Students at various institutions have protested against such flagrant dishonesty and injustice, but in such cases it usually merely changes its form and goes ahead as an inherent evil.

Seventh. The dividing line between amateur and professional in athletics is wholly conventional. The man who is coached by a professional, who is given a living under the guise of a "job," who is given free travel about the country and a liberal expense allowance, and who expects his success to secure him promotion and additional reward as an athlete, whose appearance swells the gate receipts, is scarcely less a professional than one who fights for a $5 prize. Professional pugilism, now under stringent state and Federal regulations and restrictions, is coming back under college sanction. Intercollegiate matches in the ring and on the mat

have already made their appearance. Ten years from now, if the present trend continues, states may be asked to back prize fights as education. Recently, in a state educational institution, the coach, who has been made vice-dean of men in order to allow him to draw more salary than a mere professor, has refereed prize fights for a noncollege club, where his official presence has attracted college athletes from his institution to strive for championship honors. The students by such participation become professionals, but the dean-coach evidently does not.

The Compulsion of Monetary Support

Eighth. That which might be justifiable as a student activity voluntarily supported and controlled by undergraduates as formerly, becomes a dire menace when paid for and controlled by institutions with funds conscripted from students and taxpayers. Athletic fees, which are generally increasing in amount, are now commonly levied under sanction of the school or college. They may be listed as voluntary, but woe to the student who refuses to contribute. Compulsory support by the students takes away many opportunities for developing leadership. Outside of an educational institution, no man can be compelled to buy what he does not want, without recourse. The athlete himself is in a worse state than the student on the sidelines. As suggested by a Harvard star, he is bought and paid for, he is a tool of the coach, a pawn in the game. He must play or sit on the benches as the coach decides; he must go or come at the coach's nod or beck. "And why not?" asks one writer on the subject; "the game is not for the player but for the audience which pays to see it." Is this not merely a refinement of the Roman system of gladiatorial slavery? Membership on the team generally carries with it a sacrifice by the student of the ideals for which the college is supposed to stand. His time, strength, and skill are bought and paid for.

A representative case may be cited: In a certain college there were 31 students on the various contest teams, some of them having membership on the team of three or more sports. Fourteen of the 31 had a D average in scholarship which did not give them credit toward graduation. Only three of the number had a reasonably good average. Yet certain members of the D list traveled more than 7,000 miles between the time they registered for the first quarter of college and the time they registered for the second quarter. Of course, some of them will never graduate, while others will take six or more years to do four years of college work. Many institutions are now providing courses for athletes which will not interfere with their contest programs and still allow them to receive the degree.

Subsidies and Sinecures Tolerated

Ninth. Intense competition confuses the moral sense of individuals or of groups. Contest-mad schools and colleges are led to wink at the violation of universally accepted principles of ethics and common honesty. Bribes and subsidies to secure the attendance of athletes, small jobs with good pay, and sinecures about the gymnasium and stadium encourage dishonesty in the service supposed to be rendered, and set up indefensible practices in discrimination against those with more worthy ideals. The student who does less than he is paid to do, and the student who knows about it, both have their concepts of honesty violated, while the student who is forced out of school by athletic fees which go to maintain a team of brawn, suffers a like attack on his sense of justice. Many instances of deceptive practices can be cited.

A certain institution which boasted that it was dedicated to the advancement of science, appointed a committee with one of its scientists as chairman, to justify the establishment of a degree department for training coaches. Among other peculiar scientific inductions offered by the committee was this: "We find that the most physically fit among our freshmen are those who have participated on high-school athletic teams." This was approved by the faculty as a valid reason for recommending the establishment of a coach's training school, and that without questioning whether physical fitness was a cause or a result of membership on teams.

Not long ago a state-college publication came out with that oft-related fallacy that athletes are the best students. The article purported to give averages for the athletes and for various other student groups. The athletes headed the list of averages. Now it happened that there were only about 30 men on the teams for all contest sports, and a majority of them were generally known for their poor scholastic records as well as for their athletic prowess When taken to task, the authors of the statistics admitted that the groups compared were selected to show a desired relation in average—the statistics were faked.

How the Contest Morale is Supported

The department of physical education which so frequently puts all its emphasis on winning teams, yet feels that it must justify its existance on the showing of interest and participation in other than team forms of athletics, offers, during slack times in the contest schedule, opportunities for the less fit. The head of a department of physical education which had three coaches for the team and one man for the physical training of 400 boys, made a special effort every year to get every man out for the cross-country run in the late spring. His report frequently showed that about 90 per cent of the students had participated in some form of athletics during the year. It was a joke among the students.

These examples are representative of a long list of deceptions in the interest of contests. Such deceptions are neither rare nor overdrawn. Can a high standard of morals among students be expected when they have been taught that "the end justifies the means"?

The case against interscholastic athletic contests has been frequently and well stated by schoolmen and others of vision and experience, yet, despite the fact that competitive athletics are on the defensive at every point, they still maintain a bold front and demand the lion's share. The contest morale is supported by militant forces:

1. Such alumni as received their education in the high school and college "pep" meeting and on the side lines, are back of "the team" which represents the spirit with which they were inoculated in Alma Mater. They make up in clamor for what they lack in numbers, and offer the strongest obstacle to athletic reform. Again, high schools draw their teachers from the colleges, and many of them have the spirit of the coach, and the contest enthusiasm of the "fan" rather than the ability of the teacher.

2. Since the school contest has been professionalized and commercialized, it appeals to the superficial business and social organizations which, while assuming to represent the ideals of their communities, are too likely to encourage only those activities which they think may bring trade or noisy boosting. The superintendent or principal who presumes to hold up ideals of education in opposition to the ballyhoo for numbers in attendance is likely to be asked, indirectly perhaps, but no less emphatically, to move on. It is a humiliating fact that educational administrative officers resist the domination of professional athletics at their peril. Educational ostracism under the direction of militant athletics is exercised against them. Most men capitulate.

3. Hundreds of papers devote many columns daily to school contests. The writer accurately measured the space devoted to the activities of a small college for 30 consecutive days by the daily paper in the college town. The column inches devoted to athletic contests, the team, and the coaches, was 256 in., while for the same time only 17 in. were given to all other college activities and the faculty. That is, fourteen times as much space was given to this one activity as to all others. The time chosen included registration week which should have offered opportunity for noting other interests. Even the name of the third assistant coach appeared oftener than the combined mention of all the nonathletic members of the faculty of 140. Jealousy of the attention diverted from the academic faculty prompts opposition to athletics, says the president of one of our great athletic universities in his inaugural attempt to curry favor with the alumni and students at the expense of his own self-respect. The press cannot be blamed for printing the news. It makes little distinction between professional athletic contests out of school and the same kind in school. But if the proportion of athletic news to other news is any indication of relative values, then taxpayers are buying educational service at too high a price.

Is there any compensating moral, ethical, aesthetic, physical, or intellectual value in the championship award that it should be fought for so ardently and at such a sacrifice of recognized values? Instinctive drives with attendant emotionalism resists all reasonable procedures and all attempts to fix their bounds by rules and laws. There is abundant evidence that many far-sighted college presidents and high-school principals, and even the better coaches, would welcome release from our destructive system of contests, but each is powerless to act alone, or without the evident backing of the public. Even the most flagrant attending evils must be laid at the door of a system which has so many inherent temptations, rather than to the charge of coaches and administrators.

If our tax-supported institutions are to be saved from themselves we must reach them through that support. Some such plan as the following appears to be necessary and sufficient for the present:

1. Enjoin boards of control to eliminate all paid coaches from the state-supported high schools and colleges.

2. Eliminate all coaching courses from state supported colleges.

3. Allow no team to travel beyond the boundary of the territory from which it receives the major part of its support.

4. Eliminate extramural championship contests under the penalty of the withdrawal of tax support from the schools which engage in or encourage such contests.

THE DAY'S WORK[1]

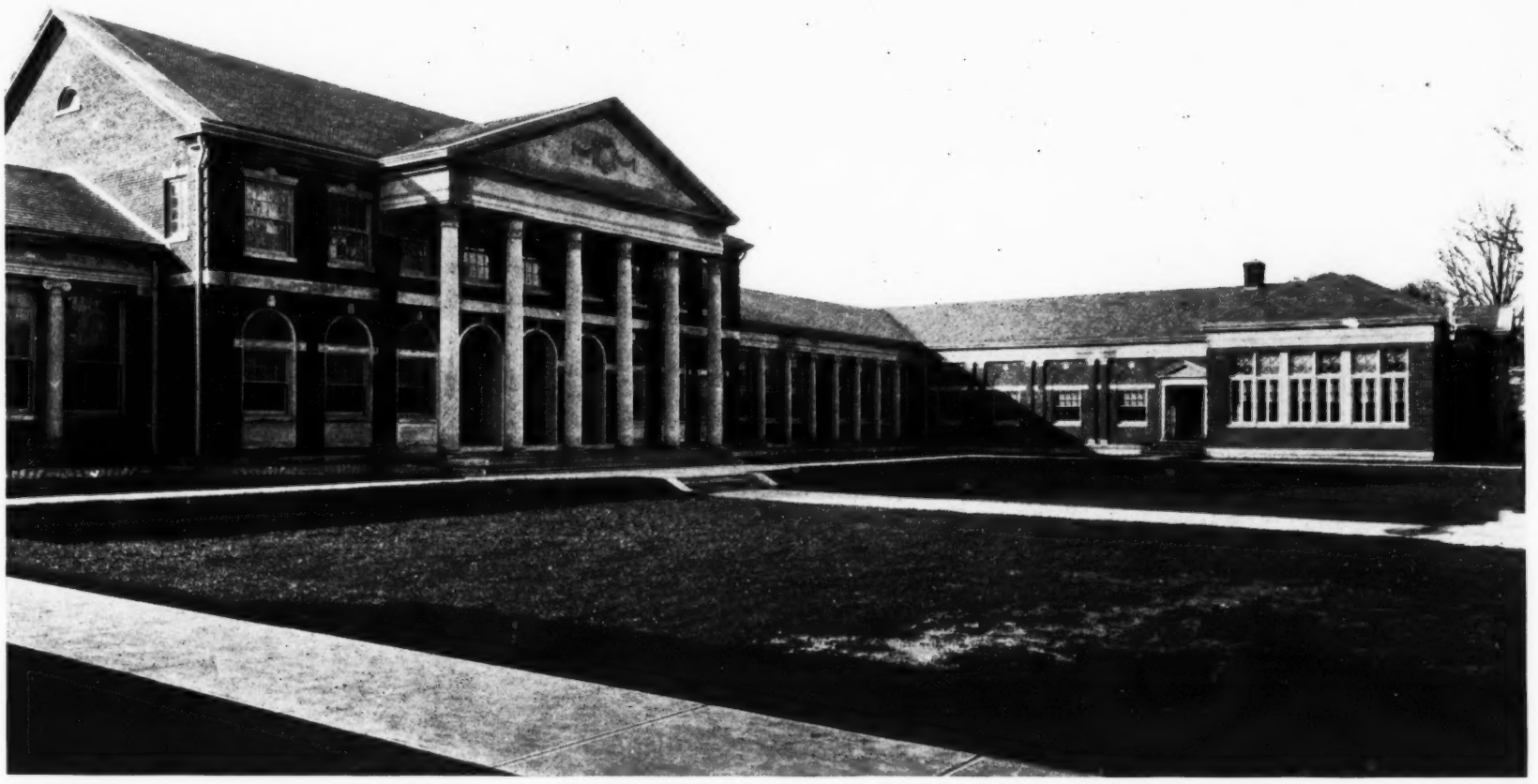
Supt. M. G. Clark, Sioux City, Iowa

Is any pupil happier because you passed this way?
Does any child remember that you spoke to him today?
This day is almost over and its toiling time is through;
Does anyone remember now a kindly word from you?

Did you give a cheerful greeting to the boy who came along,
Or a churlish sort of "howdy" and then vanish in the throng?
Were you selfish, pure and simple, as you rushed along the way,
Or is some girl mighty grateful for a deed you did today?

Can you say tonight, in parting with the day that's slipping fast,
That you really helped a pupil of the many that you passed?
Is a single heart rejoicing over what you did or said?
Does a child whose hopes were fading now with courage look ahead?

[1]Adapted from a poem by an unknown writer.



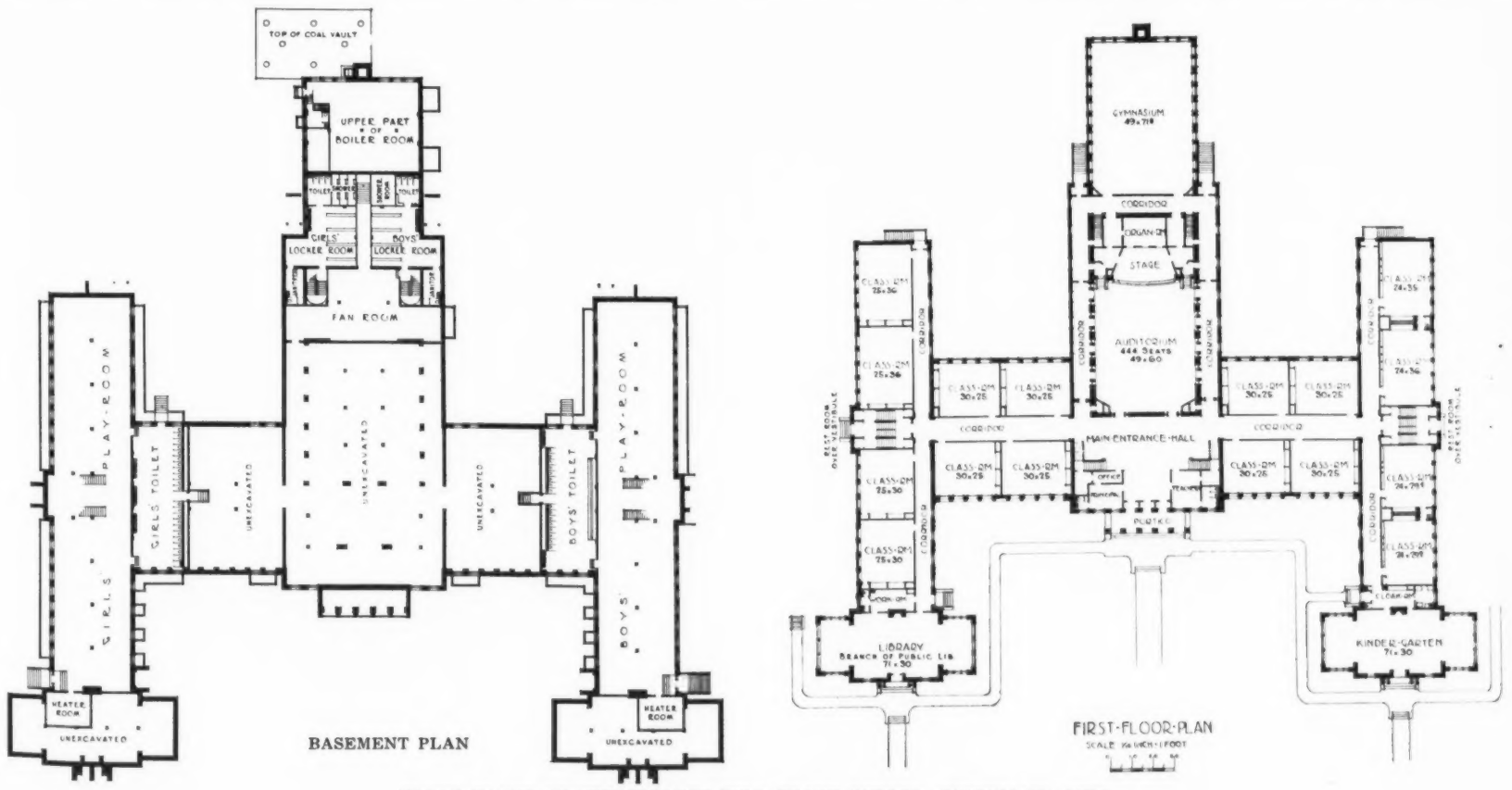
ENTRANCE DETAILS, COLLEGE HILL GRADE SCHOOL, CINCINNATI, OHIO
Elzner and Anderson, Architects, Cincinnati, Ohio.

THE COLLEGE HILL SCHOOL, CINCINNATI, OHIO

Economy in planning schools in large cities has led to the frequent duplication of plans for elementary buildings to be erected in widely separated parts of a community. The standardization of many elements in planning and constructing school buildings has been responsible also for great similarity in the appearance of school buildings, even where economy has not dictated the exact duplication of structures. The result of these two practices has given to elementary schools of many cities a rather monotonous sameness and has prevented radical experiments that have led to distinctly new forms and interesting architectural expressions by the individual architects and designers.

The zoning of our large cities has, to a certain extent, counteracted the tendency toward monotonous school planning and construction, in that the zoning laws have prohibited the erection of two- and three-story buildings in certain sections of the community and have compelled the school boards to erect one- and two-story buildings in harmony with the dwellings in strictly small-house neighborhoods. The very fact that the zoning laws compel recognition of the character of a neighborhood seems to have influenced both architects and school boards to design buildings of individuality and to try new types of layout, etc.

The new College Hill School at Cincinnati, has been erected in a neighborhood of small homes of rather better than ordinary quality. A two- or three-story structure would have been decidedly out of place in the neighborhood. The



FLOOR PLANS OF THE COLLEGE HILL GRADE SCHOOL, CINCINNATI, OHIO
Elzner and Anderson, Architects, Cincinnati, Ohio.



FRONT VIEW, COLLEGE HILL GRADE SCHOOL, CINCINNATI, OHIO
Elzner and Anderson, Architects, Cincinnati, Ohio.

architects, accordingly, decided to plan a one-story building in the dignified, quiet, and impressive Colonial style. The building fits splendidly into its surroundings, and with its well-kept lawns and old shade trees is a distinct asset to the street which it faces.

The basement of the building is for the most part unexcavated. The two wings contain playrooms and toilets, and the space under the gymnasium is used for boiler purposes, toilets, locker and fan rooms.

The main floor contains the classrooms, kindergarten, the auditorium, and the gymnasium. The kindergarten and the public-library branch have been placed at the front end of the two side wings. The arrangement makes the rooms practically independent of the balance of the building so that they can be used for community purposes without opening up the school proper. The kindergarten serves for meetings and local social-center purposes.

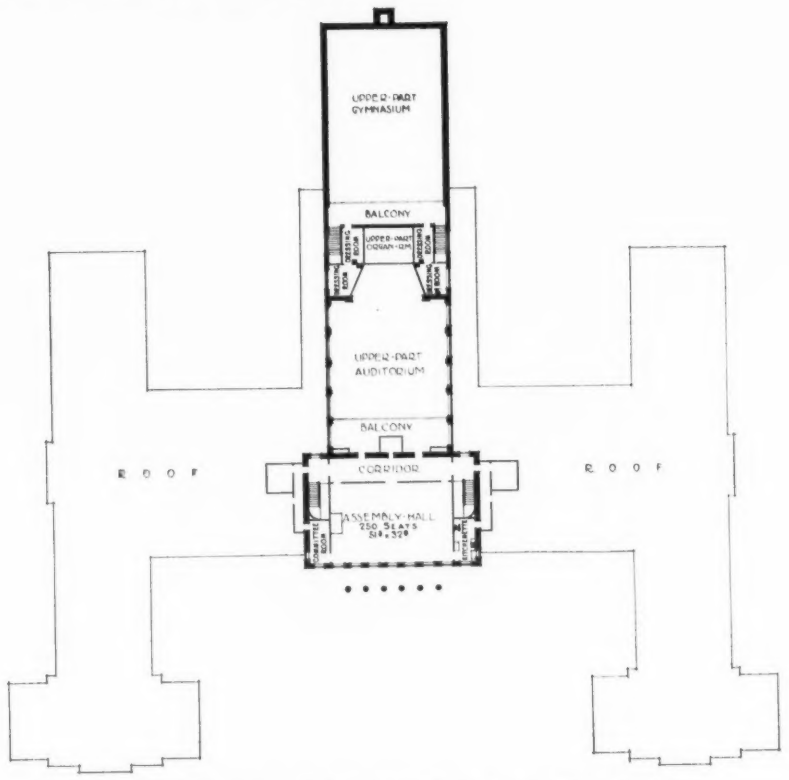
The second floor contains only a small assembly fitted with 250 seats. The upper part of the auditorium and the gymnasium extend through to the second floor.

The building was designed by Messrs. Elzner and Anderson of Cincinnati.

Details of the plan and construction are as follows:

Construction Data

Date bids received	April, 1925
Date contract awarded	April, 1925
Date construction started	April, 1925
Date construction completed	September, 1926
Date building occupied	September, 1926
Site	
Dimensions	456 by 649 ft.
Principal frontage	456 ft.
Building	
Use	Elementary
Number of Rooms:	
Classrooms	16
Branch of public library	2
Offices	1
Girls restrooms	2
Teachers	1
Auditorium	49 by 60 ft.
Seating capacity	444
Gymnasium	49 by 72 ft.
Seating capacity	500
Design and Construction Materials	
Exterior design	Colonial
Exterior facing	Brick
Exterior trim	Stone
Construction material	Brick and concrete
Corridor and stair finish	Cement
Classroom finish	Varnished wood
Auditorium finish	Painted wood
Gymnasium finish	Varnished wood
Finish of toilet rooms	Glazed brick
Mechanical Equipment	
Type of heating and ventilation	Indirect steam forced with fans



SECOND FLOOR PLAN, COLLEGE HILL GRADE SCHOOL, CINCINNATI, OHIO
Elzner and Anderson, Architects, Cincinnati, Ohio.

Cost and Pupil capacity	
Pupil capacity of building	650
Number of pupil stations	16 classrooms and kindergarten
Cost of building	$573,016
Cost of equipment	13,232
Total cost	586,248
Cost per cubic foot	45.82
Cost per pupil	881.56
Total cost per pupil	901.92

AN INTERESTING CALIFORNIA HIGH SCHOOL

Eugene Jerel Irwin

The Santa Barbara High School was completed for use during the school year 1927-28, at a total expenditure of $800,000. The building itself cost $600,000; equipment cost $100,000, and the stadium, including walks and drives, approximately $100,000. As the stadium was the donation of a wealthy man interested in the school, the actual cost in building and equipment might fairly be considered as being $700,000.

The building has a capacity of 1,200. The enrollment now is 700. As there is a junior high school to take care of the seventh, eighth, and ninth grades, the high school cares for the tenth, eleventh, and twelfth grades only. On this basis the cost of the plant per-pupil capacity would be $583. This is high, but the wealth of the community and the strong public demand for the activities of the school warrant the expenditure and the magnificent structure.

The site comprises 40 acres which is ample for the athletic fields, stadium, and possible agricultural activities. The site overlooks the town which sees the building gleaming amid stately trees and beautiful coloring.

W. H. Weeks of San Francisco and Oakland was the architect. His genius for building beautiful schools while caring for practical school needs and detail makes the plant in every sense a fit place for students to work. Superintendent Paul Stewart and Principal Homer Martin both lent their aid in making a building that would meet special educational methods and plans as shall be pointed out later.

The building was erected under three contracts: general construction, special equipment, and plumbing.

There are sixteen classrooms on the first floor, as well as two rooms for chemistry, one for physics, one for biology, one for physiography, a library and study hall, a librarian's workroom, a book-storage room, a boys' cloakroom, a boys'



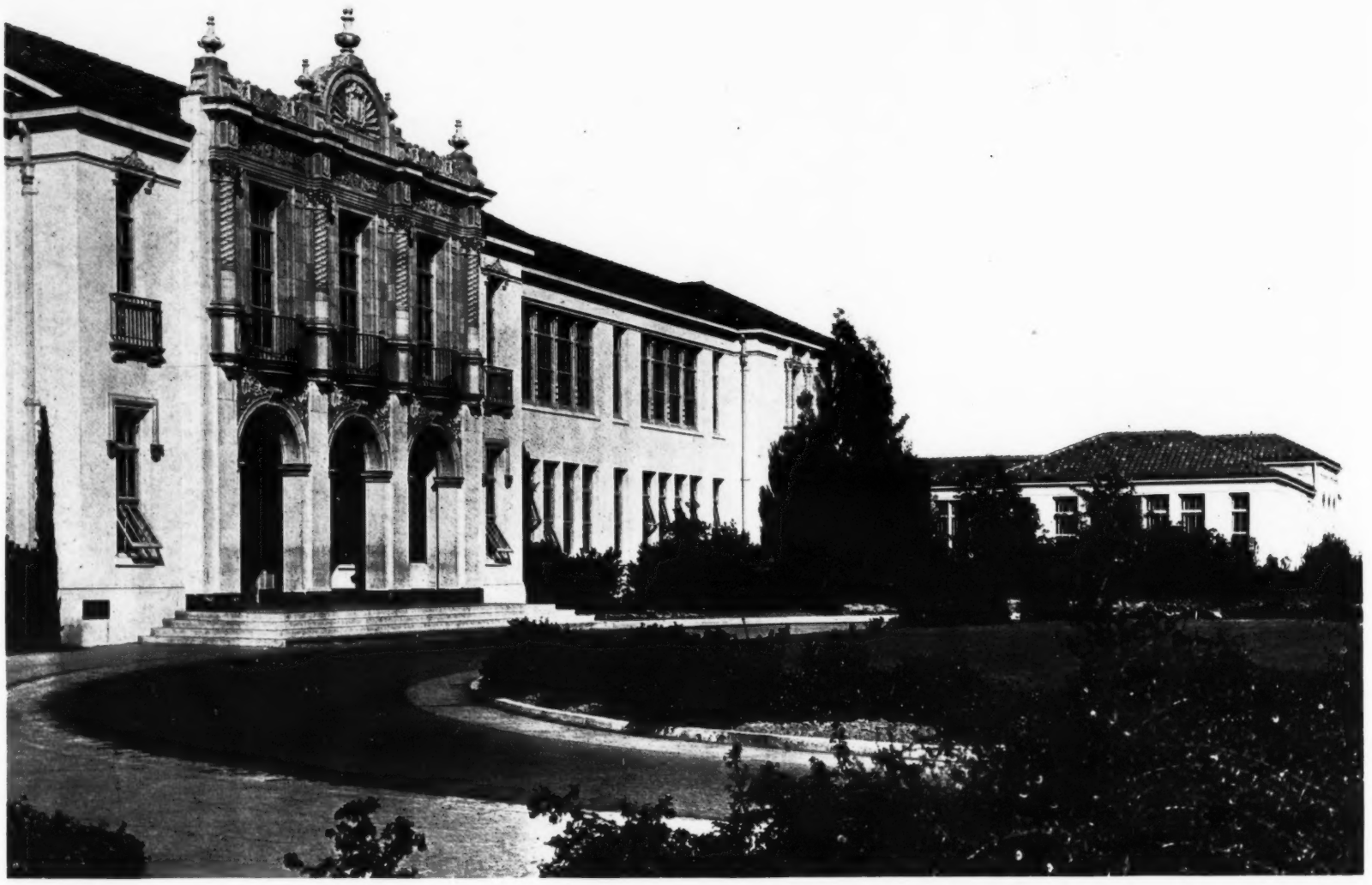
EAST ELEVATION, SANTA BARBARA HIGH SCHOOL, SANTA BARBARA, CALIF.
W. H. Weeks, Architect, San Francisco, Calif.



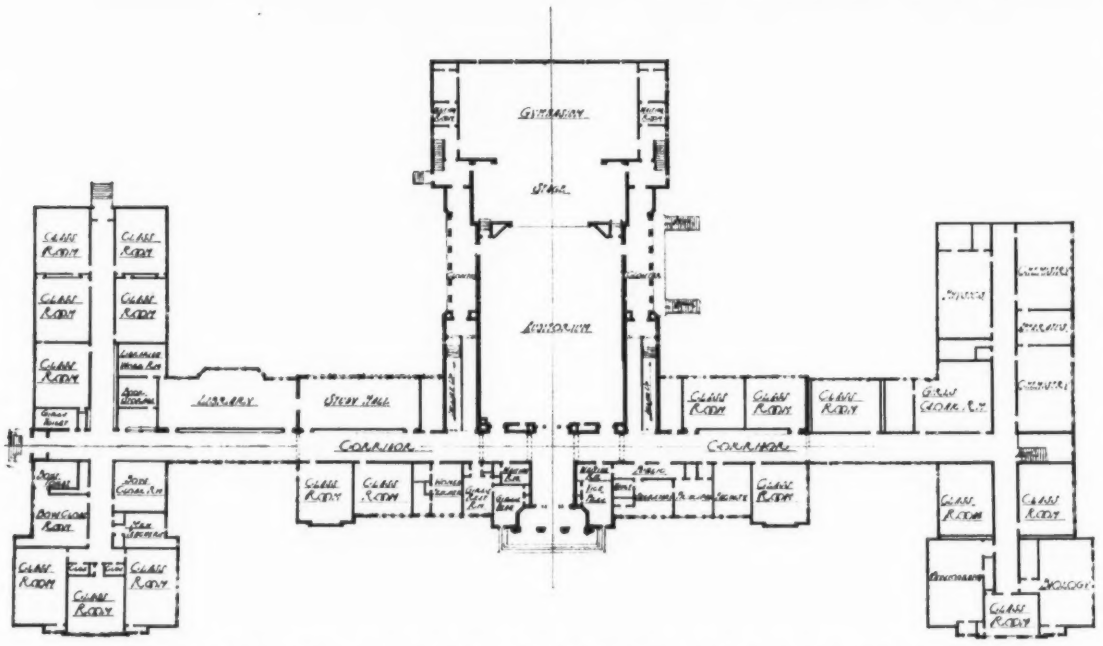
SANTA BARBARA HIGH SCHOOL, SANTA BARBARA, CALIF.
W. H. Weeks, Architect, San Francisco, Calif.



REAR VIEW, SANTA BARBARA HIGH SCHOOL, SANTA BARBARA, CALIF.
W. H. Weeks, Architect, San Francisco, Calif.

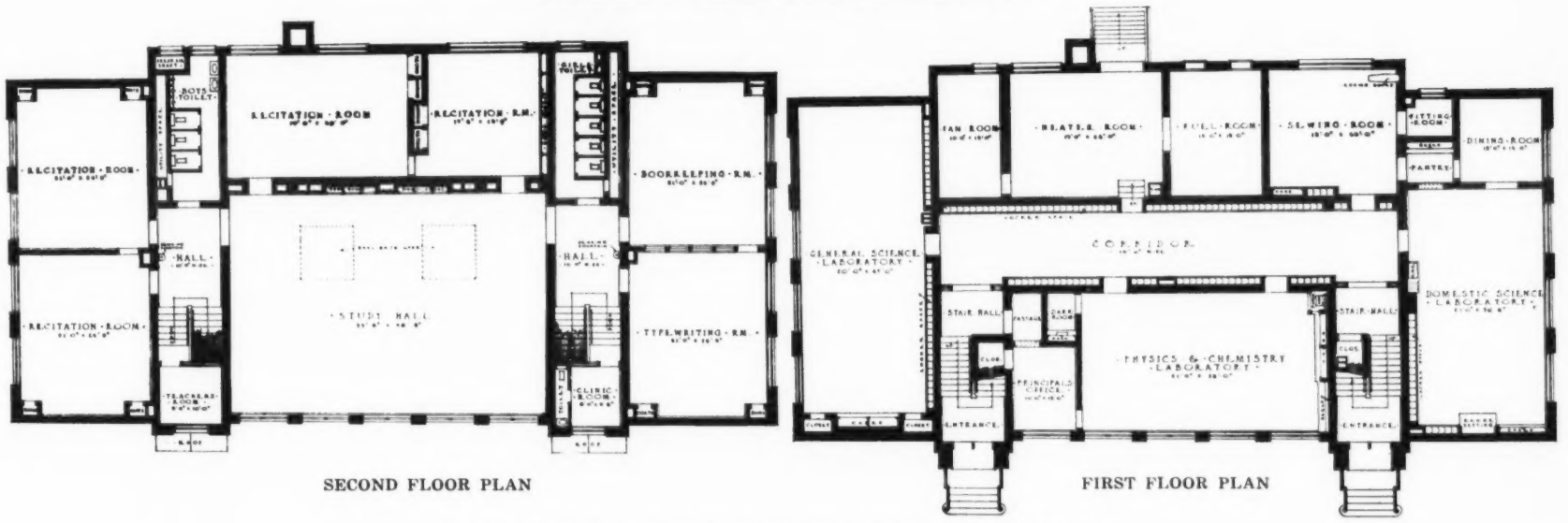


ENTRANCE DETAILS, SANTA BARBARA HIGH SCHOOL, SANTA BARBARA, CALIF.
W. H. Weeks, Architect, San Francisco, Calif.


GYMNASIUM
STAGE
AUDITORIUM
CLASS ROOM
LIBRARY
STUDY HALL
CORRIDOR
GIRLS' GYM CLOTH. RM.
BOYS' GYM CLOTH. RM.
BOYS' GYM TOILET
GIRLS' GYM TOILET
BOYS' GYM TOILET
GIRLS' GYM TOILET
BOYS' GYM CLOTH. RM.
GIRL



COMMUNITY HIGH SCHOOL, EARLVILLE, ILL.
Associates of A. L. Pillsbury, Architects, Bloomington, Ill.



SECOND FLOOR PLAN FIRST FLOOR PLAN

FLOOR PLANS OF THE COMMUNITY HIGH SCHOOL, EARLVILLE, ILL.
Associates of A. L. Pillsbury, Architects, Bloomington, Ill.

THE COMMUNITY HIGH SCHOOL, EARLVILLE, ILL.

School authorities who have the problem of helping rural communities and small towns solve their school-building problems are united in the opinion that the small school involves more difficult problems of financing and planning than does the large city school. The latter involves such huge sums for construction, that there always is sufficient leeway to provide many desirable facilities over and above the absolute necessities. The small community on the other hand must frequently strain its finances to the limit and, accordingly, must make use of the best ingenuity of architects and school officials to provide the necessities called for by the growing educational programs.

The new Community High School at Earlville, Illinois, is a building that represents an immense amount of study on the part of the architects and local school authorities in the direction of providing complete school facilities. The building, which was contracted for in March, 1926, and completed in January, 1927, is two stories high and is planned to accommodate 150 students.

The first-floor level is approximately 18 in. below grade so that the windows are of full height and the rooms may be used for class and other purposes.

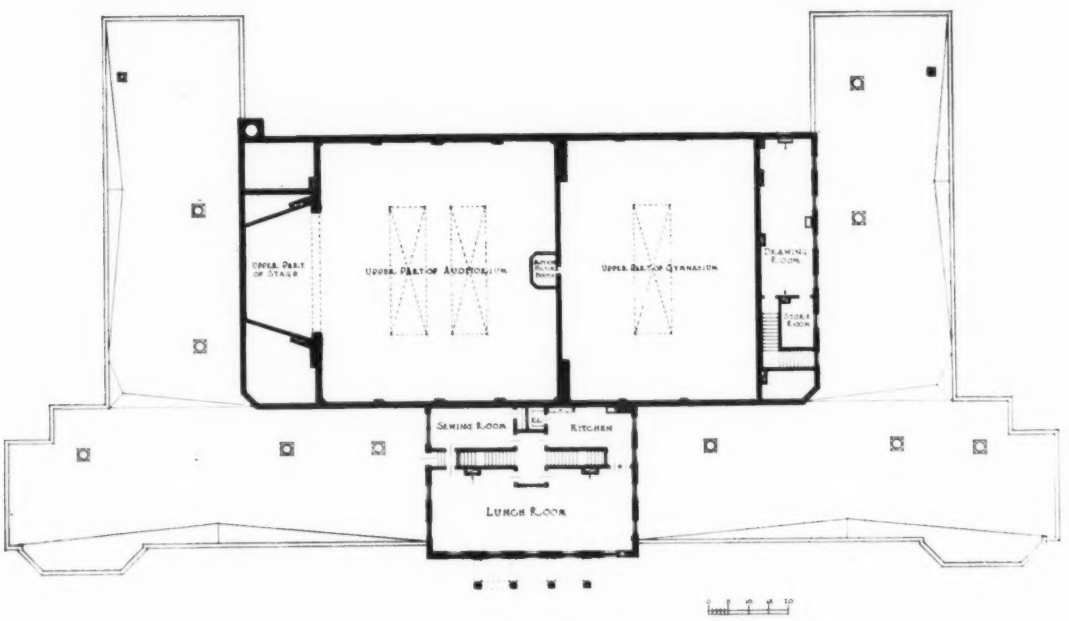
On the first floor have been located the domestic-science department, the laboratories, the principal's office, the heater and fan rooms, and space for fuel storage. The domestic-science department has been arranged as a unit so that the cooking and sewing work can be most economically administered. One of the laboratories is fitted for physics and chemistry, and the other for the type of science work needed in a rural community. Ample closet space for storage and a darkroom are part of the laboratory group.

On the second floor there are a study hall (measuring 34 by 50 ft.), four classrooms, a commercial department, toilets, a clinic, and a teachers' restroom.

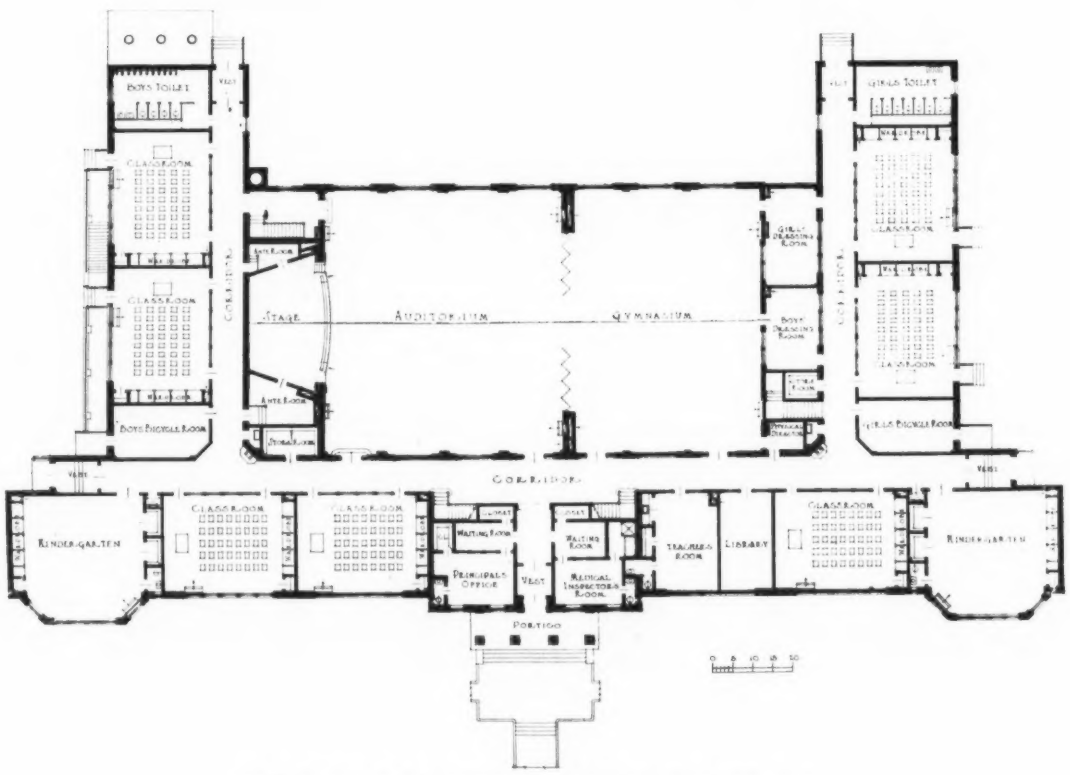
The corridors and stairs of the building are of reinforced concrete and brick, and all floors in the corridors, stairs, and toilet rooms are finished in terrazzo with a 4-ft. high terrazzo wainscot. The walls of the toilets are finished with salt-glazed brick and the toilet partitions are of metal. The corridors are fitted with recessed steel lockers for the students' wraps and books. The classrooms have supply closets and teachers' wardrobes and are furnished with maple floors, plaster walls and ceilings, and yellow-pine trim.



ROOSEVELT SCHOOL, RAHWAY, N. J.
John T. Rowland, Jr., Architect, Jersey City, N. J.



SECOND FLOOR PLAN, ROOSEVELT SCHOOL, RAHWAY, N. J.



FIRST FLOOR PLAN, ROOSEVELT SCHOOL, RAHWAY, N. J.
John T. Rowland, Jr., Architect, Jersey City, N. J.

The building is heated and ventilated with a warm-air system which is mechanically controlled for temperature.

The exterior of the building is constructed of red brick with stone trimmings. All windows are of solid-steel sash of the outward-projecting type.

The building contains approximately 200,000 cubic feet and cost $65,000. The architects were the Associates of A. L. Pillsbury, Bloomington, Ill.

THE ROOSEVELT SCHOOL AT RAHWAY, N. J.

W. F. Little, Superintendent of Schools, Rahway, N. J.

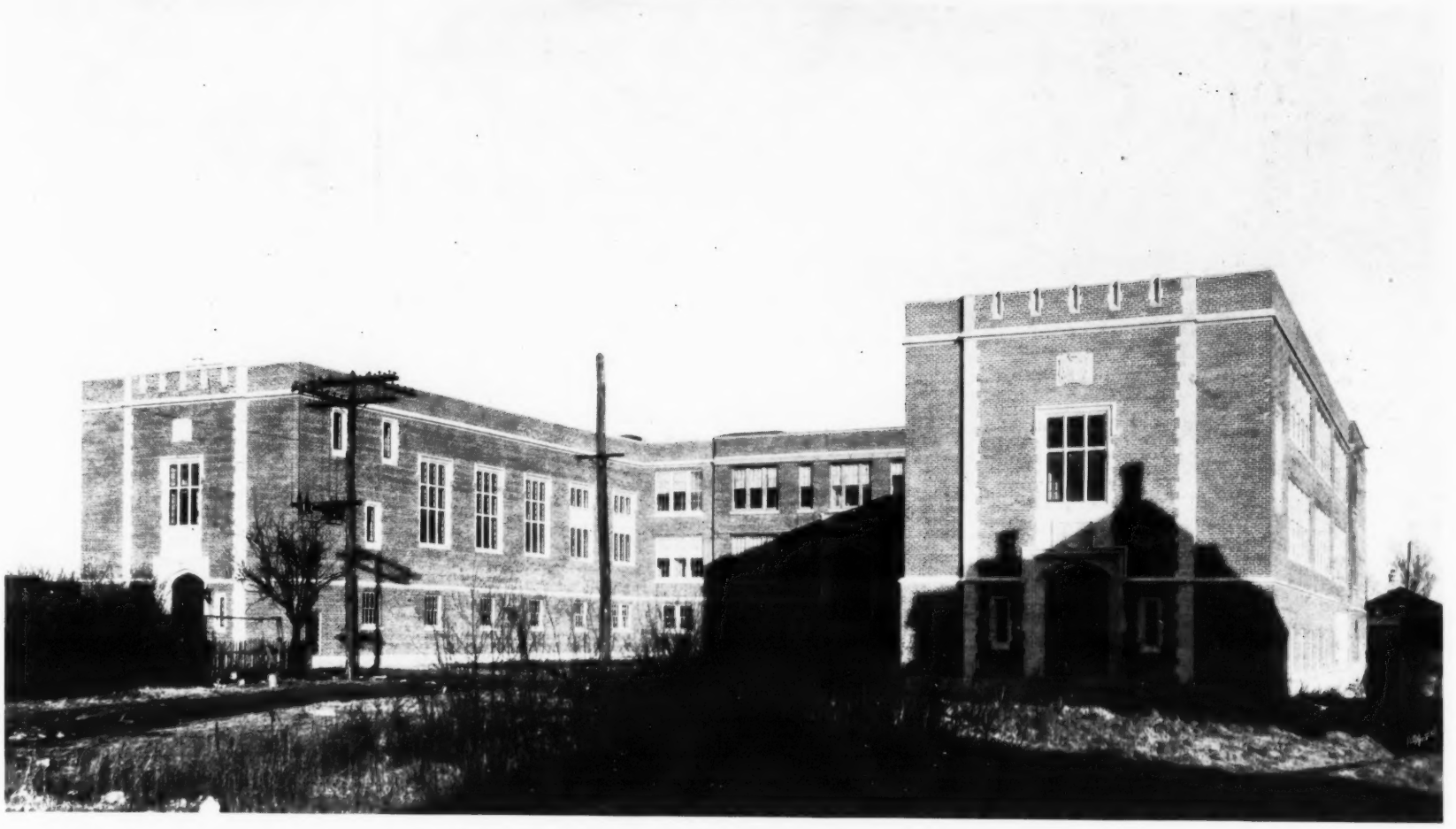
The Roosevelt school at Rahway, N. J., was built during the year 1925, and the floor plan as well as the adoption of the one-story type of plan were the result of satisfactory experience with another school building which had been opened three years previous.

The city of Rahway has been enjoying a period of growth and development during the past few years that has been highly satisfactory to her citizens as well as to those responsible for the administration of her affairs. Among the factors that have contributed to local progress has been the public-school system. The increase in population has brought with it an increase in the school enrollment and has permitted considerable expansion of the school facilities and in general of the school program.

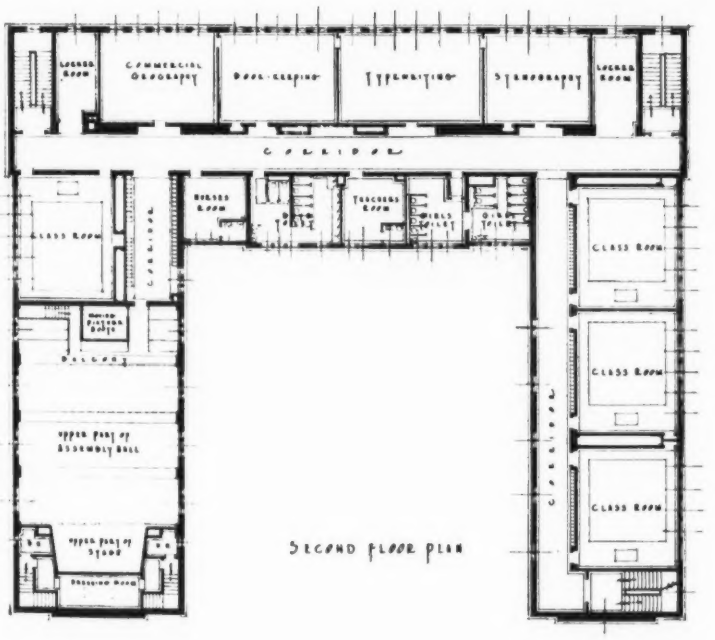
The conservative people of the community seemed very skeptical when the first one-story grade-school building was erected. After some years of use, however, all doubt as to its value for school purposes was removed from the minds of those on the firing line. In fact, the success of the earlier building was such that the Roosevelt school was planned with the one-story feature especially in mind.

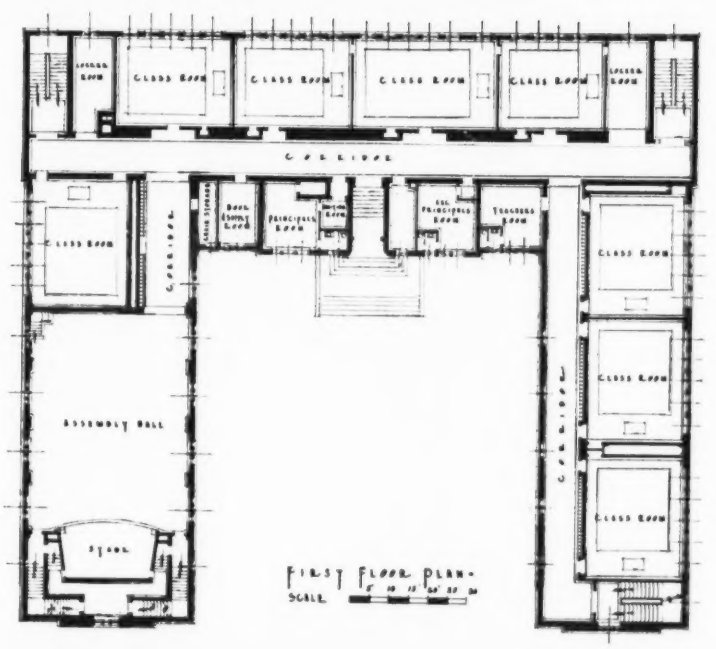
The Roosevelt school contains at present 7 standard classrooms and 2 kindergarten rooms, an auditorium, a gymnasium, offices, rooms for medical inspection, toilet rooms, and dressing rooms. The building is 264 ft. long and 30 ft. wide. The mechanical plant as well as the gymnasium and auditorium have been planned for the ultimate enlargement of the building to contain 17 classrooms as well as additional supplementary rooms.

The building cost $248,000 and was planned by John T. Rowland, Jr., architect of Jersey City, N. J.



JAMES A. GARFIELD JUNIOR HIGH SCHOOL, REVERE, MASS.
Isidor Richmond, Architect, Boston, Mass.

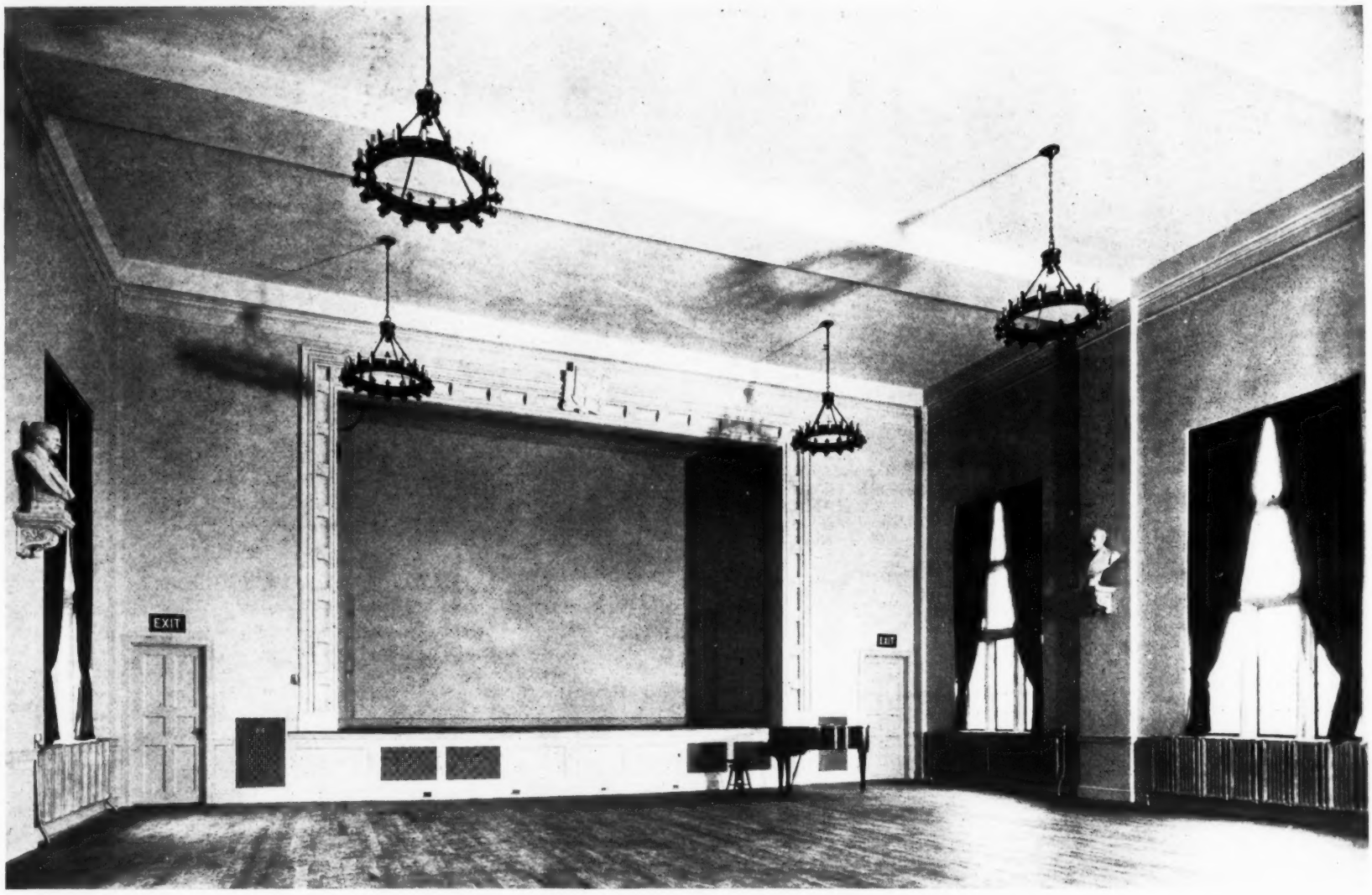








A TYPICAL CLASSROOM GYMNASIUM
INTERIOR VIEWS OF THE JAMES A. GARFIELD JUNIOR HIGH SCHOOL, REVERE, MASS.
Isidor Richmond, Architect, Boston, Mass.



ASSEMBLY HALL, JAMES A. GARFIELD JUNIOR HIGH SCHOOL, REVERE, MASS.
Isidor Richmond, Architect, Boston, Mass.



ENTRANCE DETAILS



TYPICAL CLASSROOM CORRIDOR

JAMES A. GARFIELD JUNIOR HIGH SCHOOL, REVERE, MASS.
Isidor Richmond, Architect, Boston, Mass.

A COMPLETE JUNIOR-HIGH-SCHOOL BUILDING

The James A. Garfield Junior High School at Revere, Mass.

The James A. Garfield Junior High School at Revere, Mass., represents the completion of a school building, the original unit of which was built in 1924. The first building consisted of the crossbar between the two wings of the building, and the latter were erected in 1927. The additions were made in part to care for the increased school population of the district and in part to provide additional facilities for a well-rounded junior-high-school organization.

The first unit consisted of ten classrooms, the household-arts department, two teachers' rooms, a nurses' room, offices, and toilets on each of the three floors. The new wings contain nine new classrooms, an auditorium, a gymnasium, dressing rooms, and a cafeteria.

Construction and Equipment

The building has been located adjoining a street upon which numerous improvements are being made. It also adjoins the Curtis Park playground and thus enjoys the advantages of a completely equipped eight-acre playground. The photographs on the accompanying pages show the school grounds before the grading and planting had been completed.

The building is designed in the Tudor-Gothic style and has attractive doorways to give entrance to the auditorium and gymnasium wings as well as to the main corridor of the building. Above the entrance to the auditorium wing is a shield with a coat of arms of the city of Revere and above the corresponding entrance to the classroom wing there is a shield bearing the Massachusetts state coat of arms.

The layout of the building is such that all classrooms have sunny exposure. Each classroom is 24 ft. 6 in. wide by 30 ft. long. The size is 3 ft. wider than the usual standard for Revere and makes possible the fitting of each room with 46 desks. The usual cloakrooms and wardrobes have been omitted, and lockers recessed in the corridor walls are used for pupils' clothing and books.

The cafeteria is a large sunny room measuring 35 by 62 ft. The partition between the kitchen and the cafeteria proper is fitted with sliding panels and counter for serving. The auditorium has been especially designed for simplicity and dignity. The Tudor windows measure 6 by 12 ft.; the glass is set into steel sash and the effect is especially pleasing. The room, including the balcony, will seat 460 persons. The gallery is equipped with a motion-picture booth and the stage has dressing rooms. The room is available for use by outdoor organizations, and an adult audience does not come in contact at all with the school building proper.

The gymnasium, which measures 40 by 60 ft., is likewise arranged for use by adults. The entrance is independent of the school building proper. A gallery will seat approximately 250 spectators for athletic games. Separate showers for boys and girls are provided.

A direct entrance to the boys' locker room from the adjoining playground has been so arranged that the showers may be used without opening any part of the school proper.

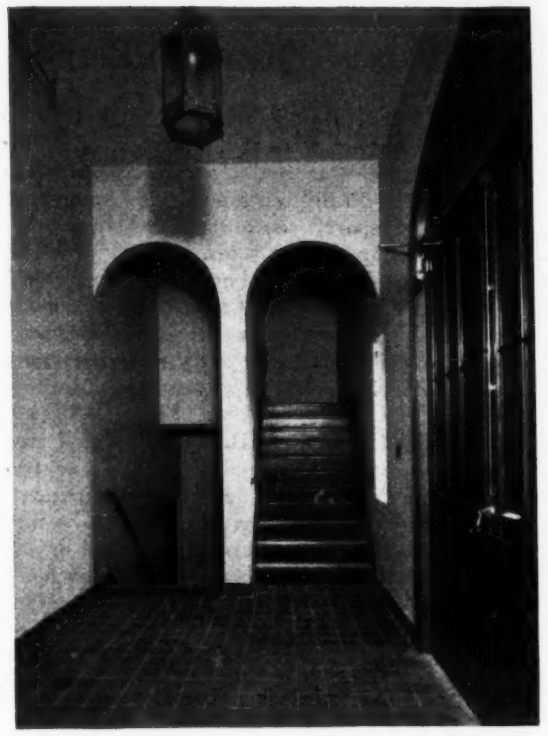
The ceiling of the gymnasium has been covered with a sound-absorbing material to prevent the transmittal of noise into other parts of the building.

The pupil capacity of the building is 828, but when the school is fully organized and each room is used to capacity during the full school day, it will house more than 1,000 students.

The building is located within a quarter mile of the sea, and for that reason piling was necessary for the foundation of the first unit, a fact which has added considerably to the total cost. The building is of so-called second-class construction with a steel and timber frame, brick bearing walls, wood floors, and walls finished with metal lath and plaster.

The plumbing is of the best type. Cold-water pipes are of wrought iron, waste pipes of cast iron, and hot-water pipes of brass. The hot-water storage tank is copper, the hot-water system is of the noncirculating type.

The building is fitted with a vacuum steam-heating system provided with a temperature



LOBBY LEADING DOWN TO GYMNASIUM AND UP TO ASSEMBLY HALL, JAMES A. GARFIELD JUNIOR HIGH SCHOOL, REVERE, MASS.

control. The ventilating system is of the central mechanical type with special exhaust fans in the cafeteria.

The architect of the building was Mr. Isidor Richmond, 248 Boylston Street, Boston, Mass.

The construction details of the additions are as follows:

Construction Data

Date bids received	June 2, 1927
Date contract awarded	June 27, 1927
Date construction started	June 28, 1927
Date construction completed	December 17, 1927
Date building occupied	December 19, 1927
Working days required	144

Building

Number of rooms	27
Classrooms	9 in new additions
	8 in old building
Commercial department	4 in old building
Number of laboratory rooms	2 in old building
Fine arts	1 in new additions
Music room	1 in new additions
Offices	2 in old building
Book-storage rooms	1 in new building
	1 in old building
Nurses	1 in new additions
Teachers	1 in new building
	1 in old building
Auditorium, including balcony with moving-picture booth	41 by 55 ft.
Seating capacity	460 including balcony
Gymnasium	40 by 60 ft.
Seating capacity	250
Cafeteria	36 by 63 ft.

Design and Construction

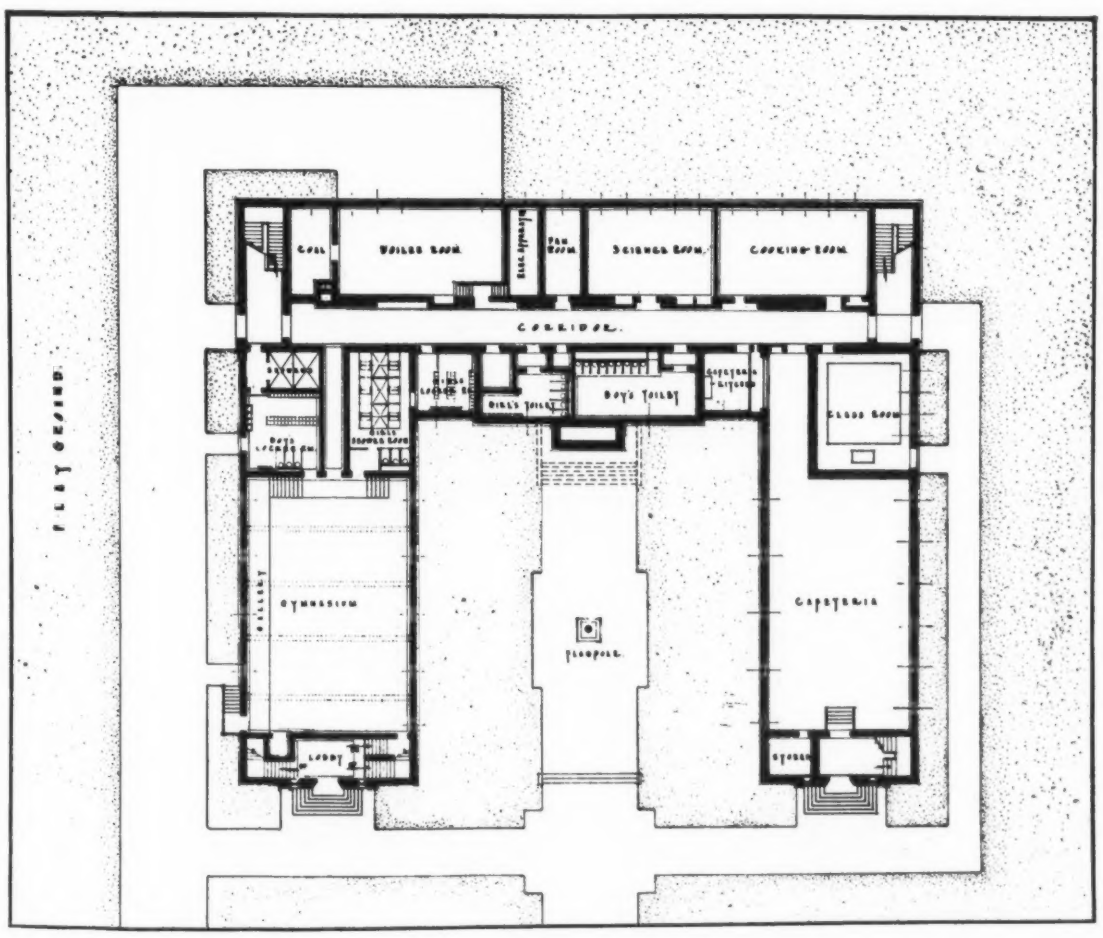
Exterior design	Tudor-Gothic
Exterior facing	Red brick
Exterior trim	Artificial stone
Construction material	Second class
Corridor and stair finish	Kittaning buff brick
Classroom finish	Plaster and white-oak trim
Auditorium finish	Plaster with wood trim
Gymnasium	Kittaning buff brick
Finish of toilet rooms	Plaster, steel partitions

Mechanical Equipment

Type of heating and ventilation	Mechanical ventilating system, vacuum steam-heating system—boilers in old building.
Temperature control	Automatic thermostatic control
Plumbing and sanitary equipment	Individual showers for girls in gymnasium. Gang showers for boys in gymnasium.

Cost and Pupil Cacapity

Pupil capacity of new and old buildings	650
Cost of new building	$138,308.08
Cost of old building	164,448.63
Total cost	302,756.71
Cubic feet of new building	391,183
Cubic feet of old building	298,971
Cubic feet of completed building	690,154
Cost per cubic foot of new building	35.3 cents
Cost per cubic foot of old building	55 cents
Cost per cubic foot of completed building	44 cents



GROUND FLOOR PLAN, JAMES A. GARFIELD JUNIOR HIGH SCHOOL, REVERE, MASS.
Isidor Richmond, Architect, Boston, Mass.

The Price of Attaining in Schoolwork

By a High-School Principal

When I am 35 years of age I expect to be superintendent of a small-city system of public schools. This is the goal I set for myself when I was a boy of 15 in high school. Realizing that I must be prepared thoroughly for such work, both through academic training and practical experience, I early mapped out a program which, so far, has been followed exactly, but not without learning the cost of steering one's own way, resolutely and only with one's own resources, toward a coveted position in the field of education.

I resolved to get an A.B. degree when I was 20, then to teach in a city high school for two years, the second year as head of a department. I then scheduled myself to break into administrative work, serving in turn as principal or administrator for elementary, junior-high-school, and senior-high-school grades. My plans called for an A.M. degree at the age of 27, to be earned during summer sessions at a large state university, not my alma mater.

All of these self-ordained demands have been met, and at present I have a responsible position as principal of a senior high school, am 30 years old, and, knowing that my schedule calls for a Ph.D. at the age of 34, I am attending the summer quarters at a well-known private university making the first year's residence on the final degree, preparatory to taking the one whole year necessary to complete work for the degree at a large eastern university. After I have the Ph.D. I shall make a nation-wide canvass in search for the job for which I have been preparing myself most diligently.

My greatest problems in keeping on schedule have been those of securing the right kind of positions and getting necessary promotions. Earning most of my expenses while at college as an undergraduate student and meeting the rather high costs of postgraduate work, now allowed from a family budget, have presented difficulties, but these are not to be compared to those encountered in being particular about the kind of work I have done. One can name his job only when certain more or less inelastic conditions are met.

I have found that in order to get the positions I have wanted, I have had to be independent and always free to move. I have had to forego the pleasure of owning a home, and, incidentally, I expect to forego that pleasure until I am 60 years old, when a real home is to be endowed from a regular and careful investing of 5 per cent of my earnings up until that time. Owning a home often ties a schoolman to a community, and many times school boards capitalize on this situation.

In the nine years I have been doing public-school work I have moved five times, twice more than a thousand miles. Distant fields look greenest to board members as to almost everybody else, and I have found that I have had much more prestige as a stranger than as a neighbor.

At times I have had to be positive, aggressive, and have had to make bold demands. I have worked hard to deserve advances, and I have never wavered in claiming them. Either they were granted or I moved, and in three cases I moved even when they were granted. It has always been my policy to make my board feel that I was not anxious to stay. I have always had money enough at the end of a year to pack up and leave if I needed to.

I have worked day and night to make my job count in curricular and in extracurricular activities. Socially, I have almost been a nonentity, though, of course, I have always strived to be as social as possible. I have never joined any fraternal organization. I have consistently refused to wear pins or badges or in any other way mark myself as belonging to a special organization or group of people. This neutrality has not made a host of friends for me, but on the other hand, it has made no enemies. It has given me a great deal of extra time for my job.

In every possible way I have tried to improve myself professionally for my particular kind of work, but aside from this preparation, I have considered the importance of always trying to look the part I expected to play. This has cost me several good cars, some expensive clothes, and the many little appurtenances requisite to give the proper atmosphere in the office and study. In short, most of the things I own and most of the things I do are owned or are done to help me attain what I set out to attain fifteen years ago. Such a process is costly, and at times is inconvenient and permits very little diversion, but I count this all to be the price one must pay to get what he wants in schoolwork.



MR. C. E. C. DYSON
Architect of the Board of Education,
Toronto, Ontario, Canada

As chief architect to the Toronto board of education, Mr. Dyson has had complete charge of the planning, the preparation of specifications, and the general supervision of the construction of about $10,000,000 worth of schools annually for nine or ten years past. To a certain extent he has standardized certain elements of plan and construction and has largely emphasized the educational services and exact adaptation of rooms and buildings to the educational program. At the Denver convention of the National Association of Public-School Business Officials Mr. Dyson was elected vice-president for the year 1928-29.

Principles Governing Teacher-Placement Procedure

I. T. Simley, South St. Paul, Minn.

In deliberations incident to the placement of teachers, there are certain responsibilities that fall upon, and certain rights that accrue, to each of the parties concerned in the transaction:

A. The employer or party about to engage a teacher;

B. The teacher or candidate herself;

C. The party placing the teacher, or the placement authority.

These responsibilities and rights, which are briefly set forth in the outline below, are suggestive of the relationship that ought to prevail in the course of the deliberations.

A. Employer:

I. *Responsibilities*

1. To keep foremost in mind that the rights of the children to be taught and their educational welfare are paramount to any or all rights appertaining to the position to be filled of any other party.

2. In the light of the above, and in terms of the financial remuneration and other considerations of the position to be filled, to seek out the best possible candidate available for the position regardless of the source of supply, provided, however, that our appropriate state institutions including the state teachers' employment bureau, shall have been included among agencies first called upon for assistance.

3. Toward the above end, to give to training and placement authorities as complete information as possible with reference to the peculiar requirements of the position to be filled.

4. To notify both applicants and placement authorities as soon as the position has been filled.

II. Rights

1. To have it understood that placement authorities will recommend candidates in the light of the principle of "children's rights first." This presumes, nothing being said to the contrary,

a) Satisfactory moral and health qualifications so far as known;

b) Proper technical training and professional preparation, but in degrees varying from satisfactory to superior and, accordingly, so rated;

c) Adaptable personal equipment, under which come such characteristics as special abilities, social qualities, outstanding interests, religion, nationality.

2. To be supplied with as complete and comprehensive information as those in a position to know are able to give, this information to include:

a) A rating on specific teacher success qualifications or failures;

b) A general or free statement unrestricted by the limitations of the set form.

B. Teacher:

I. *Responsibilities*

1. To recognize that the rights of those to be taught supersede the rights of the teacher.

2. To recognize the responsibility of employer and placement authority to use their influence in filling each position with the best available candidate.

3. To notify both placement authority and employing agencies with whom she has filed application as soon as she is no longer available.

II. *Rights*

1. To know that she is given a fair chance to be considered and fair consideration after filing application.

2. To be notified if she is not being given consideration or as soon as the position has been filled.

C. Placement Authority:

I. *Responsibility*

1. To collect reasonably complete information appertaining to each candidate's qualifications and fitness for teaching, this information to consist of:

a) A defined rating by each responsible reference on recognized factors of teaching qualifications;

b) A general confidential statement unrestricted by the limitations of a set form.

2. In the light of the information available in regard to each candidate, and in terms of the requirements and rewards of each available

(Concluded on Page 136)

Taxation and County School Support

Roy C. Woods, Ph.D., Marshall College

Public education, everywhere, must of necessity be supported by taxation. The amount of money which can be raised by taxation is determined by the taxing limit of the community and is dependent upon it. The taxing limit of the community is determined by the assessed valuation which is, in theory at least, supposed to bear a fixed relation to the true wealth of the taxing unit. That taxing units are not, usually, assessed at full value, even when required by law is evident from the numerous studies and from common observation. The close relationship of school support, assessed valuation, and real wealth or valuation, together with the fact that the assessed valuation as placed by the assessor seldom agrees with the real valuation as shown by actual transfers gives rise to a demand for a technic whereby trends in community wealth may be studied.

Ability of Communities to Support Education

Numerous studies in various localities bear out the common observation, that school costs are constantly rising. More and more money is demanded almost annually for school purposes. On the whole, the American people have responded nobly to this urgent need, but of late, there has been a noted tendency to ask for reasons. These questions have been forthcoming from both layman and the profession itself. "Can the American people afford this program?" It has even been suggested that perhaps we have reached the point of saturation, or the point where the law of diminishing returns must operate.

Every year brings new demands upon the school. New subjects knock for admission. Better trained teachers are demanded. More students seek entrance, and they remain longer. The schools have become the "dumping ground" for all the worth-while things that were formerly cared for by other agencies, and these all cost money. The schools apparently are approaching the "point of saturation" financially, with no apparent slackening of the increasing demands upon them. If the numerous school surveys have taught us anything, it is that more and more money will be needed to care for the demands of instruction, buildings, and maintenance.

Relation of Taxes to Wealth of Community

The writer has felt that there is a close relationship existing between the taxes raised for school support and the wealth of a community. In short, the schools "pay their own way" in the form of increased economic wealth as shown both in earning and spending power. As a public-school administrator the writer is frequently called upon to defend the costs of his system. The two working together, convinced him that some investigation should be made to determine the existing relationship, and to perfect a technic whereby other school administrators might study their local problem. Under the capable direction of Prof. E. T. Peterson of the University of Iowa, the writer undertook such an investigation covering Chickasaw county, Iowa.

The first problem to present itself was to determine the assessment policy of the district or county involved. Only a casual observation was necessary to show that in the study of the wealth of the community, the assessed valuation as shown by the assessor's books was wholly undependable. The lack of uniformity among different assessors strongly suggested that they probably were nearly, if not as undependable, in assessments made within the same district and by the same assessor. Some means must be used to correct this error of assessment. To do this the "sales technic" was used. The scope of this paper does not permit an extended explanation of the technic; however, a brief explanation is essential.

The "sales technic" consists of finding the percentage of the real value of the assessed property as shown by actual sale or transfer value at which the property was assessed by the assessor. This "assessment ratio" is found by dividing the assessed value by the real or sale value. In Iowa the assessed valuations may be secured from the auditor's office at the courthouse and the sale valuations from the recorder's records. In this particular study, all the transfers for each fifth year for a period of 50 years were used in a study of the assessment policy. In all, approximately 5,000 transfers were studied. Obviously, many more had to be discarded due to fictitious considerations such as "for love and other considerations." Some of these could be corrected and used during the years in which the revenue acts were in force which required a stamp of 50 cents for each $500 or fraction of consideration. For practical purposes the writer is convinced that fewer transfers can be used. He has the problem under consideration at present and the data seem to bear out that feeling.

The next bits of data needed are the assessed valuations of the county as a unit and as rural and urban property. These can then be corrected by using the "assessment ratio" average found above as an index of correction. For example, had the average of all the properties transferred shown that the assessors had assessed at 50 per cent of the actual value, the real consideration would have been the total assessed valuation increased by that amount, or doubled.

Taxes and School Expenditures

Both the amount of taxes raised for schools and the amount of school expenditures, are indications of school costs. Both will not give the same number, however. The amount of taxes may be secured with the other tax data, and the school expenditures from the county superintendent's reports. Both were used in this investigation. From these data two questions can be answered. First, What has been the assessment policy in Chickasaw county, Iowa?; and second, What has been the trend in the relationship of the past 50 years between the school costs and the property valuation in the county? These can be answered for both rural and urban property as well as the county as a unit. A third question was investigated. In substance it was, Can the trend of school costs and real wealth of a community be predicted from data or inferences drawn from past trends? Each of these three questions will be discussed in this paper.



All studies had shown that the assessment ratio was well under 100 in Iowa. The school surveys, notably in Indianola, Cedar Rapids, Marshalltown, and Davenport, had shown this to be true, and in the case of Davenport it had been shown that the ratio was constantly dropping since 1900. The rest of the surveys had contended themselves with a study of one or two years' transfers. In the case of Davenport, the ratio had fallen from 77.5 in 1901 to 45.7 in 1924. Such a decline as indicated would more than offset a substantial increase in wealth, when surveyed by a layman unacquainted with the facts involved. During the past 50 years (1875 to 1925) striking variations existed in Chickasaw county. This is true not only within the 50 years taken as a whole but also within any given year. It existed not only among different assessors, but among the assessments made by the same assessor, "it is difficult to conceive the motive, or the standard of value governing the assessor." The lowest assessment found was 0.18 per cent of its transfer value, and the highest for the 50-year period was 2640.0 per cent of its transfer value. A more striking variation was found in 1880, when the highest ratio was 2640.0 and the lowest was 3.3, making a difference of 2636.7. It may be rightly argued that the highest and lowest cases might be the result of unkown factors and thus not be valid for comparisons. This is not only a possibility but a probability; however, the middle 50 per cent of cases shows an equal variability although not so extreme. In this case the range was from 13.7 to 97.3 per cent of actual transfer value. This makes a difference of 48.3.

Ratio Has Dropped

There was shown a decided tendency for the ratio to drop. This was the case in both the rural and urban property and was almost uninterrupted from 1875 to 1900 when, due to a change in the code placing the tax upon only 25 per cent of the assessed value, the assessment ratio arose abruptly again.

This consistent lowering of the assessment is probably the result of the method of appointing the assessor by local election. Since he is appointed locally, he is under constant pressure to lower the assessments. There are also certain advantages in having the entire district assessed at a low figure, because in so doing a partial exemption is obtained from certain state levies. This in turn, however, necessitates a high mill levy for local expenditures.

A consistent showing was that the rural property was assessed at more nearly its transfer value. This again is possibly due to the fact that the assessors for the most part are untrained in property values and finance. To the assessor it is no doubt true, that the 160-acre farm looks more valuable than a small lot on the main street of a business district, whereas the reverse is more probably true. In these days of unrest among the farmers and the clamor for reduced taxes, the statement is often made that the farmer pays more than his just share of the taxes. These statements are made for the most part upon mere opinion and not upon any scientific evidence produced. The figures seem to bear out the contention that a greater percentage of city property is left unassessed and untaxed than rural property. This is probably more than offset by the fact that rural property and districts support poorer schools; or, at any rate, they pay less to support their schools than does the property in the urban areas.

A study of the various codes of Iowa show that the state has been committed to full assessment at transfer value, and since 1897 to taxation only upon 25 per cent of the assessed valuation. The investigation shows that the assessors have made no attempt to assess at the actual value, and that while the law provides for boards of equalization, they do not function in carrying out their legal obligation of bringing these assessments up to actual market value.

The answer to the third question, Can future trends be predicted from past trends in fiscal data? was not answered satisfactorily. Obviously, the administrator of schools is more interested in knowing how much he can raise in the future than what the past wealth trends have been. The application of the regression equation used by the Educational Finance Inquiry, and the application of the average increment method both proved discouraging as a means of accurate prediction.

It appears from the study that estimates which are to be serviceable should be made for short periods of time, and should be constantly revised as new data are gathered. Any program of expansion which is dependent upon a prediction of future trends should be one with a reasonable degree of flexibility, or with sufficient latitude to absorb the error of prediction. This will necessitate conservatism and judgment in the matter of predictions and in the program based upon the same.

The writer is inclined to believe that for practical purposes another method, namely, common sense, exercised by a prudent and experienced administrator of schools will produce the best results.

Is Education Worth What It Costs?

As stated above, the writer has always had an a priori conception that education costs nothing. In other words, it pays its own way. The growth of the Nation has paralleled the growth of the educational system, or should it be stated that the growth of the educational system has paralleled the growth of the Nation. Schools are supported by taxation, which is the people's way of showing that the country and its privileges are worth what it costs. The ever-increasing tide of immigration only strengthens one's feeling that is must be worth the price to live in this country. Should taxes be raised to the point where this is not true, the "flow of gold" would be outward because capital seeks the most advantageous location. The tide of emigration would also set in. The writer is unaware of any such tendencies. In short, it must be well worth all that it costs to live in the United States, and the various functions of the government, of which the schools are but one, must not be costing too much, provided the money is expended with economy, foresight, and justice. Stated in another way, there is a significant reason why the Nation's growth and her educational system's growth have paralleled each other.

Professional prejudices may be instrumental in interpreting these facts. There are two other possible explanations as to the reason of this parallelism. The increasing wealth of the country may have given more leisure time and feeling of a need for more and better education. This demand, arising as it did from increasing wealth, kept pace with the increase. Again, neither may be true, but both may be the result of a common cause. Which one the reader favors is of little consequence. The facts, as brought out by the investigation show that regardless of the cause, there is a striking tendency for the costs in education to parallel the increase in wealth of the community.

A Summary

There is a tendency for the costs of education in the urban areas to increase more nearly, or even more rapidly than the wealth, whereas in the rural area the wealth appears to increase more rapidly than the school costs. This indicates that the cities are supplying a better grade of education, and any advantages the city property holder may have over rural property by merit if the lowered assessment ratio is completely offset by the added school-tax burden. It also may indicate why the rural people pay less for the schools. Since they do pay a greater amount of state taxes by reason of the assessment being higher they have less to pay for good schools. In conclusion the study has shown:

1. Property has been, and is assessed, at less than market value and this assessment ratio is constantly tending to decrease.
2. Rural property tends to be assessed at more nearly its true value as shown by the transfer value.
3. There has been a tendency throughout the period for the assessed valuation of property and school costs to increase in approximately the same ratio.
4. There is a tendency for school costs to increase more rapidly than wealth in the urban areas, and to remain approximately equal in the rural areas.
5. The attempt to predict the future trends from past data was only successful in reaching an approximation. Neither of the three methods investigated gave accurate results. This leads one to believe that for practical purposes the "best guess method" is the best and that any program of expansion must depend upon sane and conservative prediction, be subjected to short prediction and constant revision, and be flexible enough to absorb the inaccuracies which are to be found in predicting fiscal data.

High-School Failures

R. F. Peters, Superintendent Public Schools, Monticello, Ky.

Under present systems of high-school organization a certain amount of pupil failure is inevitable. It makes no difference what kind of system is used, or what kind of educational or psychological experiment is being conducted, the high-school failure is always in evidence. There have always been failures in schoolwork, and in all probability there will continue to be failures in the future. We have learned to expect them and to take them as matters of course. Herein lies the danger. While it is hardly possible to eliminate failure from our schools, we are always confronted with the task of keeping it down to a minimum. The alert and conscientious teacher cannot evade the responsibility of making pupils succeed in spite of themselves. He cannot afford to acquire an indifferent attitude toward failure, whether in large or small doses. There may be too little failure or too much failure. The question is, "How much is enough?" This is the teacher's problem and no one but the teacher can solve it.

Within the past few years remarkable progress has been made in the adjustment of curricula to the needs and abilities of pupils of secondary-school age. We are getting away from the idea that high schools exist for the sole purpose of preparing pupils for college. We are endeavoring to prepare pupils not only for college but for life. Vocational courses are being differentiated to such a degree that pupils who cannot go to college may graduate from high school fully prepared to assume responsible positions in many walks of life. Students are being assigned to work which is in keeping with their native ability, as determined by standardized tests and psychological measurements. Traditional subject matter and methods are being impartially and microscopically examined by experts, in an effort to determine what is best to abandon and what is best to retain. Revolutionary changes are being made to the end that every American high school may be made to serve its community in a worth-while and practical way.

Despite the sweeping and far-reaching readjustments and reforms which are being initiated and carried out in secondary-school work, we are still faced with the problem of failure. Generally speaking, there is too much failure rather than too little. In most public high schools of average size, we find the usual crop of repeaters who, more than any other one factor, lay the schools open to charges of extravagance and inefficiency. While many of the repeaters are potential failures when they enter the high school, and are mentally incapable of doing the work, we cannot escape the fact that a very large percentage of our failures are exceptionally well prepared, mentally and physically, to do the work in a way that would reflect credit on themselves, the school, and the community.

It would be folly to attempt to classify into groups the kinds of pupils which are found in the democratic and cosmopolitan American public high school. However, it is possible to identify certain groups of pupils which are more or less typical of the public high school. Briefly, they are the "regular" group, the so-called uneducable group, the vocational group, the incorrigible and irresponsible group, the intelligent but indolent group, the loafers and hangers-on, the eccentrics, the athletes, the social butterflies, and the bluffers. There may be considerable overlapping of types, but all are found in the public high school. In the nature of things, we expect some of these to be failures. We do our best for them while they are in high school, for we know from experience that they will eventually drop out of the picture. But we also know from experience that failure takes its toll from among pupils of the very highest type. It is with these pupils that we are primarily concerned in this paper.

Possible Reasons for Failure

It would be difficult to enumerate, within the limited scope of this discussion, all the reasons for failure in the secondary school. It is possible, however, to point out certain conditions, which are more or less common in present high-school organization, and to which much of the failure may be attributed. In this connection it may be stated that we have no desire to be harsh, or pessimistic, or condemnatory. We shall endeavor to describe actual conditions, and to make our criticisms as unbiased and constructive as possible.

One of the outstanding reasons for high-school failure is irregular attendance, which is due in large measure to the indifference of parents and school officials, and to lax or inoperative attendance laws. In many states attendance laws do not apply to pupils of high-school age. High-school work is entirely optional; it is considered to be sufficient if children can be made to complete elementary-school work. Even

if the law did apply to pupils of high-school age, our indifferent parents and school authorities would still be with us. In many communities, pupils feel at liberty to remain out of school at any time they feel so inclined. Certain pupils take a half-day recess for every circus parade, show, or demonstration that comes to town. It is not even necessary to have an excuse of this nature; street loafing furnishes sufficient incentive. If written excuses from parents are required by school authorities, the student apparently has little difficulty about producing the excuse. It reaches the principal, properly filled out and signed, presumably by the parent. Whether or not the signature is genuine is a matter of conjecture. Generally, the excuse is accepted without question, the blank is filed and the absence is marked "Excused." The failure of such pupils follows as a matter of course.

Inadequate preparation is another reason why pupils fail in high school. In the regular four-year high school the solution of the problem of failure may often be found in the seventh or eighth grades. The foundation should be laid in these grades, if high-school work is to be successful. The teachers of these grades should be exceptionally well qualified, and in addition they should be made to realize that they are largely responsible for the later success or failure of their pupils in high-school work. This applies to both rural and urban teachers of these grades. In this connection it appears to the writer that a junior-high-school organization finds its highest justification.

As was stated at the outset, the tendency today seems to be in the direction of providing high-school instruction in accordance with the needs and natural abilities of the pupils who attend, so as to make the high school serve its own particular community in a bigger and better way. However, not all high schools are organized and operated with this end in view. In some cases, especially where smaller high schools are concerned, it has been found impracticable, if not impossible, to dispense with the old and assume the new. In such schools, all pupils must take the same subjects, regardless of needs, abilities, or aptitudes; electives are unknown. In the very nature of things, curricular variety is the ideal but never the reality. Consequently, many pupils in such schools find themselves confronted with obstacles that are almost insurmountable. They are the victims of routine and formalized procedure to such a degree that they would commit rank heresy by asking the question, "Of what use is this subject to me?" or "Why should all students be required to take this particular subject?" Obviously, many failures result from the uniform requirements and inexorable routine of traditional high-school curricula.

Pupils Have Not Learned to Study

When pupils enter our high schools, it is usually taken for granted that they have learned how to study. But have they? As soon as pupils have been classified and assigned to classes, the average teacher plunges immediately into the content of the course without pausing to investigate the habits and capabilities of the human material with which she is to work. This procedure is especially disastrous in the cases of such subjects as English, Latin, history, and mathematics, where a proper beginning is absolutely essential to assure future success and proficiency in the work. As a matter of fact, this applies to all subjects of the high-school curriculum, but is especially applicable to subjects similar to those mentioned above.

Much has been said and written on the subject of "how to study." In some high schools each pupil is required to read some scholarly and deeply psychological treatise on the subject. The treatise in question may be interesting and intelligible to the instructors, but of doubtful value to the students. The pupil skims over the discussion because he is informed that he must do it, and in most cases, proceeds promptly to forget all about it. If he gleans any information at all, he fails to apply it to his work. It seems to the writer that a few simple rules for study laid down by the teacher for the guidance of pupils at the beginning of the course, and reiterated and reemphasized at every suitable opportunity thereafter, would be of infinitely more service in aiding students in the formation of good study habits.

Be that as it may, it is undoubtedly true that few high-school pupils have definite and rational study habits. Most of them know what to do but not how to do it. Not a few of our high-school students join the ranks of the army of failures because of faulty study habits and lack of intelligent teacher guidance in the inculcation of sound habits of study.

Within the past few years extracurricular activities have come to occupy an important position in modern high-school organization. These activities are filling a long-felt need in enabling children of adolescent age to find themselves. In giving pupils an opportunity to participate in clubs, athletics, publications, etc., the social interests and instincts of adolescents are being recognized and cared for as never before. Such activities are helping to initiate a new era in educational development. And yet these activities are being carried to such extremes in many high schools that positive harm rather than good is resulting from them. In high schools where this condition exists, pupils are losing sight of the fundamental objectives for which the schools exist. Regular curricular work is being neglected with the result that the number of failures in such high schools is increasing rapidly year by year.

It may be stated here, that, while extracurricular activities are of inestimable value, they should never be allowed to encroach upon the primary functions of the school. In fact, the student's right to engage in extracurricular activities should depend largely upon the showing which he makes in his regular work. Thus, the extracurricular program may be made to serve a useful and constructive purpose in the American high school. It may become a very effective instrument for preventing failures rather than for causing them.

Right Classification Important

Failure is often due to improper classification and lack of intelligent guidance in the selection of high-school subjects. In the bustle and confusion of registration, pupils are often placed arbitrarily into this or that group with such lack of discretion that the results are disastrous to them. In many instances they find themselves required to do work which is utterly unsuited to their needs and abilities.

It must be admitted that it is often necessary to exercise a certain amount of arbitrary action in the classification of pupils, because of the fact that few high-school pupils know what is best for them, but it is wise to "make haste slowly" in this connection, especially in the cases of children who are entering high school for the first time.

In the cases of more advanced students, the privilege of election is often abused. There are always students who are seeking so-called "snap" courses, and arbitrary action is again necessary. The system of electives for adolescent children is effective only when properly safeguarded by intelligent guidance.

The importance of the problem of high-school classification can hardly be overestimated. It is sufficient for our purposes to state that the success of any school policy for the prevention of failure depends in large measure upon the classification methods which are employed.

Iron-clad grading systems constitute another reason for pupil failure. The writer can think of no educational problem which calls forth greater diversity of opinion. Practices vary to such a degree that one is often constrained to doubt the value of any grading system. In one community daily grades count two thirds and examination counts one third; in another, daily grades three fourths and examination one fourth; in still another, fifty-fifty; and so on, ad infinitum. Whatever the grading system, the teachers who issue the grades must be taken into account. A failing grade for one teacher would be a passing grade for her next-door neighbor; a grade of A by one teacher would be considered B, C, D, E, or F by others. And so it goes.

Suffice it to say that all grading systems are more or less arbitrary, and no pupil should fail because of a system. There may be extenuating circumstances which should be taken into account; there should never be a shadow of doubt about the failure of a pupil or his inability to do the work of a particular course.

In connection with the subject of grading it might be well to mention that, after pupils have made one or more poor marks, they are often confronted with the mathematical impossibility of passing, under the grading system of a particular school. The writer knows of many instances when pupils were actually told by the teacher that there was no hope of passing. In nearly every such instance the pupils became so depressed and discouraged that they either dropped out of school, or continued to attend with no other purpose than to make themselves disagreeable as loafers and trouble makers. The teacher who prognosticates grades in such manner not only harms the pupils but shoulders additional disciplinary burdens. It is well enough to bring the pupil's attention to unsatisfactory work, but it should never be done in such a way as to discourage continued effort to do better work. Furthermore, no pupil should ever be made the sacrificial victim on the altar of a relentlessly exacting grading system.

Pupils Need Textbooks

In some schools, lost, strayed, and stolen textbooks are prominent among the reasons given by students for failure to do the work assigned by teachers. While this is somewhat far-fetched as an explanation of failure, it is quite possible for a pupil to fail in a subject because of the lack of a textbook, especially when the nature of the subject necessitates a more or less close adherence to textbook essentials, or when the teacher happens to be what is called a "textbook slave." While it is desirable to supplement the work outlined in the text by suitable outside material, it cannot be denied that the lack of textbooks will often handicap pupils so seriously that failure may be the result.

For the most part, high-school students are prone to allow their books to slip away from them. When this happens, the usual procedure is either to borrow books from others or attempt to get along without books. Such haphazard and slipshod methods tend to bring about failure. The efficient teacher insists that each student be provided with the proper textbook; if the book is lost or misplaced, the student is informed that he must provide himself with another as soon as possible. Thus, no pupil may be able to attempt to explain his failure on the ground of having had no textbook.

In some localities free-lance summer schools are conducted for the benefit of high-school students who have failed in one or more subjects during the regular school term. As a rule, such summer schools extend over a period of six weeks, or twelve weeks, if there is sufficient demand. The qualifications of the instructors thereof may or may not be equal to the qualifications of the regular high-school teachers. The student pays tuition fees in accordance with the number of subjects which he carries. In some instances new work is offered for the benefit of

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The Evolution of the Public-School Plant

Arthur B. Moehlman, Professor of School Administration and Supervision, University of Michigan

One of the fascinating, but much neglected, fields of research in public education is that of the evolution of the school plant. It is a field that affords great pleasure to the worker in that it creates again the successive attempts of the past to express themselves educationally in permanent form and shows how social need, discovery, method, and curricular content reflect themselves in building types.

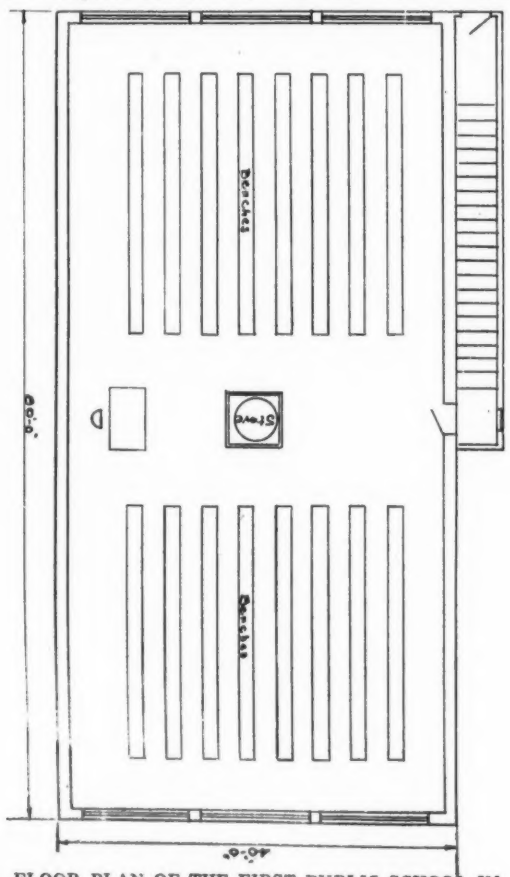
Each generation proudly erected its buildings and declaimed upon their perfection and their permanence. As each successive plant was dedicated to useful activity, it seemed to those who had participated in its development that perfection had been reached at last and that structurally the final word had been spoken. Long before these early structures were worn out physically, they were succeeded and replaced by different and finer buildings. Each generation built in terms of its own needs and ideals, and in turn was succeeded by others.

The story of the evolution and development of American public education can be read as clearly in the plans and elevations of former structures as in a textbook dealing specifically with curricular evolution. These buildings were a concrete expression, in brick and mortar, of the curricular content, objectives, methods, and organization. The story is clearly written for those who care to study the physical plant. Sometimes change is rapid, and again the movement toward newer activity is hardly perceptible for many years. The story of American public education, as written by school buildings, is eloquent witness of the dynamic character of the American social organization.

In this particular study, the school district of Detroit will be used. The selection is due to several reasons, among which were the availability of continuous records and the successive stages of development through which the district had passed. Practically all of the building records were available in some form, in uninterrupted sequence, from the beginning of public education in 1842 to the present time. Samplings were made in a number of other cities, but complete records in each case were so difficult, if not impossible, to secure that the study was allowed to follow the line of the easiest available material. The second, and even more important, reason was that the school district of Detroit has passed through all of the successive stages from the earliest form of educational expression to the point of earnestly attempting to solve the pressing and intricate problems of the school plant in as scientific a manner as possible. It was possible, therefore, to trace the complete evolution from its poorest to its best expression.



BISHOP UNION SCHOOL, DETROIT, MICH.



FLOOR PLAN OF THE FIRST PUBLIC SCHOOL IN DETROIT, MICH.

The Elementary School

The educational background of the Detroit district, prior to the organization of free public schools in 1842, may be rapidly sketched.[1] The preschool period, 1701-96, includes the French and English control of this gateway to the greater lakes. The formative period, 1796-1842, includes the period of sporadic private effort, 1797-1817; the experimental period, 1817-38; and the district-school period, 1838-42. From the standpoint of the school plant, the only interesting factor in the formative period was the development of a Lancasterian school and a classical academy in Detroit by the University of Michigania, or the Catholepestimiad.[2] This school was opened on August 10, 1818, on the first floor of a two-story building, 24 by 50 ft. The upper floor, consisting of two rooms, was occupied by a classical academy and a library. The first floor had a single room and was developed by Lemuel Shattuck in the traditional manner of the monitorial system.[3] The only picture that remains of this first structure is the commemorative tablet erected on the original site by the University of Michigan Association of Detroit.

During the district period, 1838-42, seven one-teacher schools in a dependent district were operated in rented buildings, in a private residence, in a frame building especially built for the purpose, and in the basement of a Methodist church.

The First Public School

The first free public school in Detroit was a single rented room over a grocery store on the river front, on Bates Street. It had been used also during the time of the district system. The schoolroom was reached by an outside stairway which opened into a room, 40 by 80 ft., lighted bilaterally on the river and street sides. As reconstructed, from available data, this school had a large wood-burning stove in the center, with rows of benches on each side, and the teacher's desk placed comfortably near the stove. The school was ungraded; reading, writing, and arithmetic were taught in such amounts as the children appeared to need.

[1]For a more complete account of this period, see Public Education in Detroit, Moehlman, A.B., Public School Publishing Co.
[2]The legal predecessor of the University of Michigan.
[3]The Platoon School by Spain, C. L., Macmillan Co., p. 118.

The board of education had no funds in 1842 with which to erect permanent buildings and no program of ultimate school organization that would have justified them in so doing, even had funds been available. The board did the only sensible and possible thing by renting available space and opening the schools as quickly as possible. Four buildings were rented in 1842 at a cost of $160. The Washington Market Building, Larned and Wayne Streets, was fitted for school purposes for the sum of $75 and used until 1847; and the old university building, on Bates Street, was used from 1844 until 1858. In 1843, they spent $540 to erect a one-room frame building on West Park Street, near Grand River Avenue. This was removed in 1855. The most favored place for schools during this time seemed to be the basement of churches. These could be rented cheaply and, in many cases, had already been furnished for Sunday-school purposes.

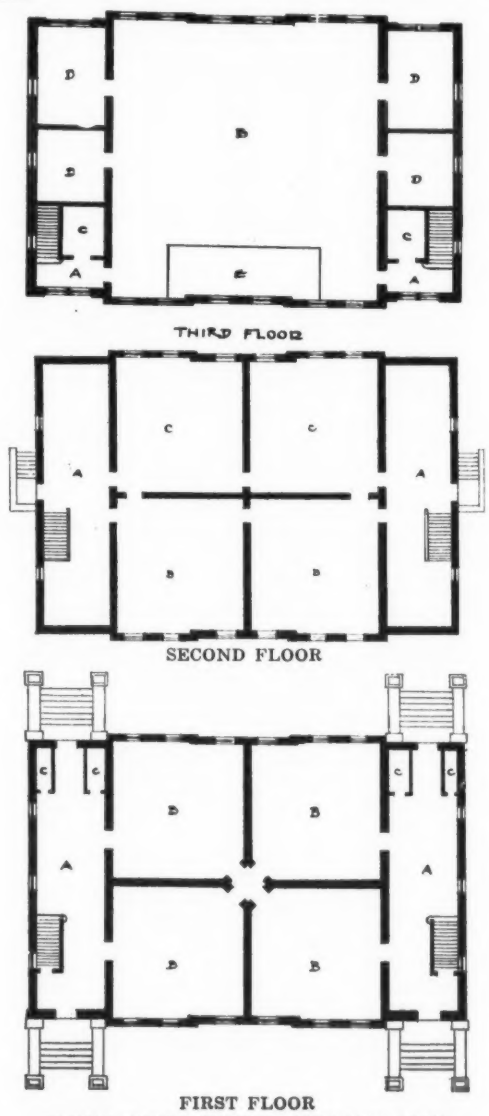
In 1847, the board owned three houses and the old Capitol Building of which possession had been taken when the capitol was moved to Lansing. One frame building, on Fort Street, east,[4] was inherited from the old district board. This was used until 1869, when it was sold for $39.

Before proceeding further in the study of Detroit buildings, it is necessary to digress and introduce the basic plan which influenced the Detroit school design for many years.

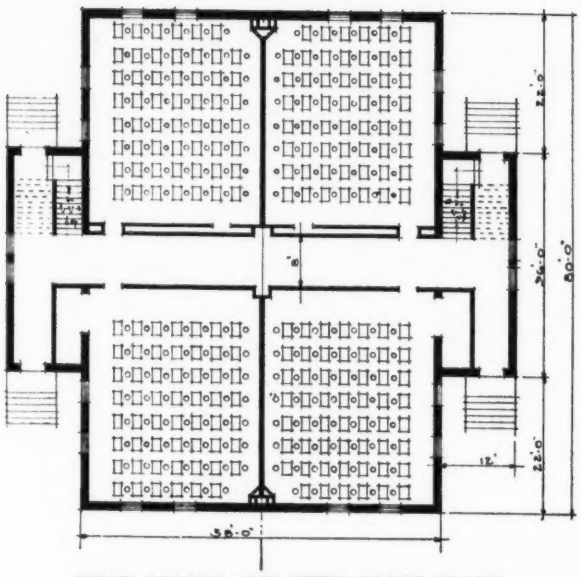
The Quincy School

The Quincy[5] Grammar School, in Boston, was built in 1847 and became an accepted model for

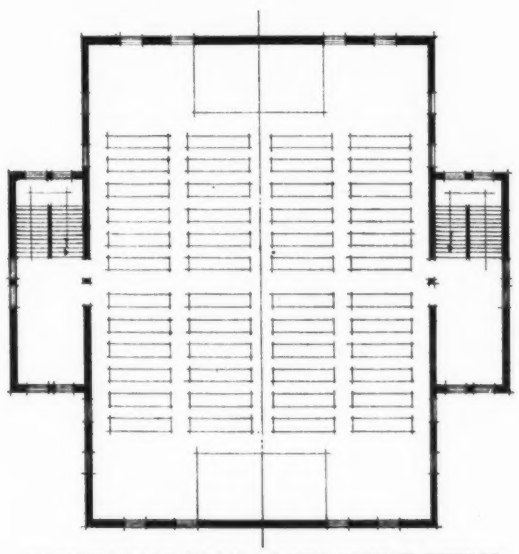
[4]Present Everett site.
[5]School Architecture, by Henry Barnard (Fifth Edition, 1854). Case, Tiffany and Company, Hartford, Conn.



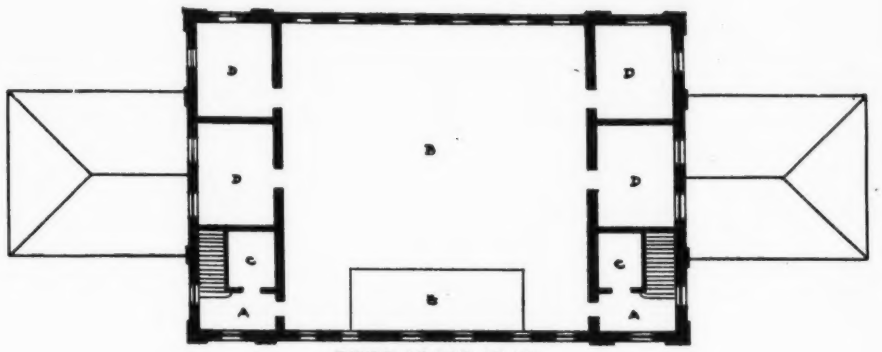
FIRST FLOOR
BISHOP UNION SCHOOL, DETROIT, MICH.



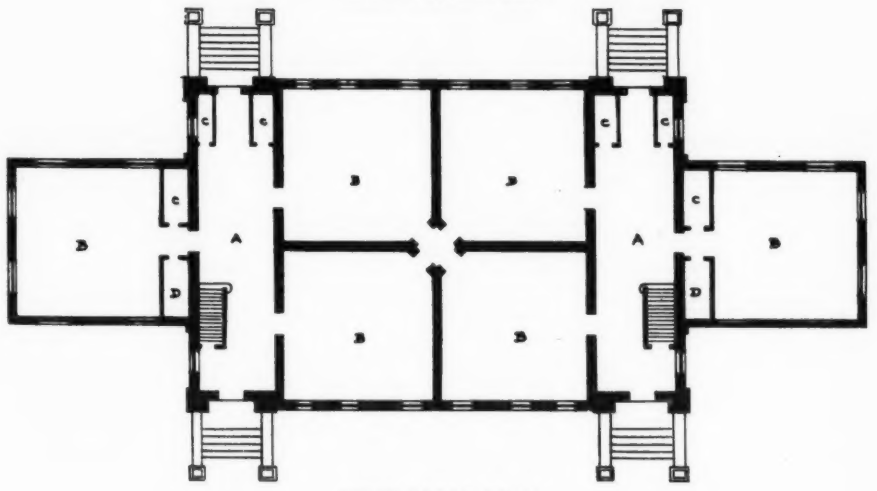
FIRST, SECOND AND THIRD FLOOR PLANS OF THE QUINCY SCHOOL, BOSTON, MASS.



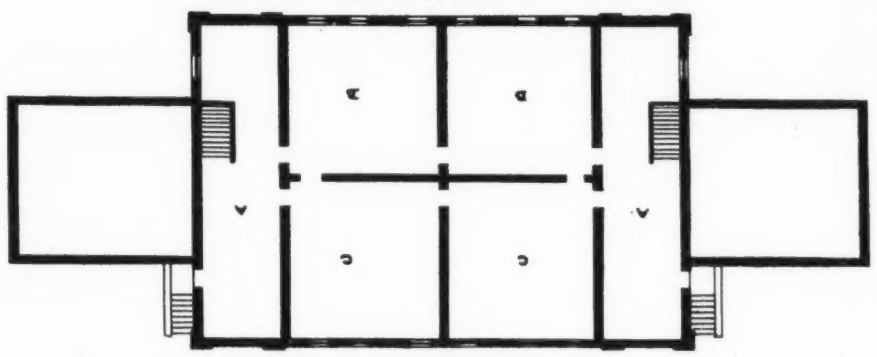
FOURTH FLOOR PLAN OF THE QUINCY SCHOOL, BOSTON, MASS.



THIRD FLOOR PLAN



FIRST FLOOR PLAN



BASEMENT PLAN
CASS SCHOOL, DETROIT, MICH.

elementary schools in different sections of the country. The basis plan was used for many years with only slight changes.

The ground plan was in the form of a cross, with the exterior dimensions of the body measuring 58 by 80 ft. The wings, used primarily as entrance corridors, were 36 ft. deep and 12 ft. wide. It was four stories high, 8 ft. in the clear, with a basement for the furnaces and fuel and an attic for gymnastic exercise. Each wing contained a front and back entrance, a flight of stairs from the basement to the attic, and a room on each floor 10 by 11 ft. connected with a schoolroom. The floors were divided by a corridor 8 ft. wide, extended across the main body from one wing to the other and having two schoolrooms on each side.

These four schoolrooms were of nearly the same size, averaging about 26½ by 31½ ft., and 13 ft. in height. Each room was lighted by two windows at each side and two at the end. A platform for the teacher, measuring 5½ by 24 ft., was also provided. The pupils' desks faced the platform and the windows on the side of the building, and were separated by aisles 1¼ ft. wide. There were individual desks, 2 ft. in length, made of cherry, varnished, and supported by cast-iron stands.

The schoolrooms that did not have small rooms attached were provided with closets for the children's clothes. There were two sinks in the corridor, with conveniences for introducing Cochituate water. The rooms were lined with composition blackboards 3½ ft. wide and 2 ft. from the floor.

The first three stories were essentially the same. Each room accommodated 56 pupils, with one desk and chair placed on a small movable platform for a monitor.

The fourth story was finished as a hall, 16 ft. high in the clear, with a platform at each end, measuring 11 by 22 ft., and 22 in. high. It was furnished with settees arranged in four rows, sufficient to accommodate 700 children.

The windows were furnished with inside blinds having revolving slats, so that the light could be easily regulated.

The building was warmed by four furnaces placed in the basement, two at each end. Each furnace was intended to warm the three rooms immediately over it, while the cast-iron chimneys were relied upon to heat the hall. Emerson's system of ventilation was introduced after the building was finished, and each room had a separate air duct, 14 in. square, to the roof.



WASHINGTON UNION SCHOOL (1871), DETROIT, MICH.

The School Organization in 1849

The Detroit schools were organized as detached primaries and middle schools from 1842 to 1848. Consequently, there was little need for anything better than a one-room building. The union-school movement, which began to grow in popularity, was introduced in Detroit in 1849, despite numerous objections from taxpayers who claimed it "an extravagance and an unwarranted procedure in making the little children walk farther to school." To meet these objections, a number of detached primaries were allowed to exist, temporarily, while the union-school movement went on at a rapid rate. The union school brought the primaries, the middle school, and the senior department together, forming a seven-year elementary school. This was formally organized in 1862 to include: primaries, two years; second grade, two years; and senior grade, three years.

The First Standard Type

To meet this change in school organization, new buildings were required and the first result of the new policy was the Barstow Union School, opened in May, 1850. This building was the first permanent schoolhouse to be erected by the board of education and drew its architectural inspiration from the classic. Colonnaded portico covered most of the front elevation, surmounted by a well-designed bell tower. Five years after its erection, the building was

(Continued on Page 139)

THE AMERICAN
School Board Journal

WM. GEO. BRUCE
WM. C. BRUCE } EDITORS

EDITORIAL

AGAIN THE MARRIED WOMAN TEACHER QUESTION

The great surplus of teacher talent in this country at the present time has prompted boards of education to draw tighter the lines against the married woman teacher. Little was heard on the question a few years ago when the shortage of trained teachers was acute. Many had left the profession to go into the more lucrative positions in the commercial field caused by the world war. The result was higher salaries for teacher service and a flitting back to the profession.

In normal times when the profession of teaching becomes overcrowded and every young woman that has graduated from a teachers' college is strenuously seeking a position, the whole married woman teacher question assumes a new aspect.

Just now the oversupply of teacher talent is phenomenal, which has prompted boards of education to scrutinize more closely the list of applicants recommended by the superintendent. The latter is usually guided in his choice by the rule of professional fitness only, and leaves the matter of policy regarding married and unmarried applicants to the board of education.

Resting the question in the abstract at a point where teaching ability is the sole determining factor, the champion of the married woman teacher readily wins his case. The board of education, however, is inclined to bring concrete facts and conditions into play, and deal with the subject in its social and economic phases. While the educator clings to the theoretical, the board member considers the practical side, and where those who champion the cause of the married woman teacher in a spirit of sentimentality, the board member becomes a hard-headed realist.

In analyzing the arguments that have been set forth so frequently and vehemently, it must be said that much of the sentimentality advanced by the married woman teacher advocate is mawkish and irrelevant. Among the favorite arguments employed are the claims that opposition to the married woman teacher is a protest against marriage itself, that the married woman is necessarily better than the unmarried one, that a woman may be teacher, wife, and mother, all at the same time, and comply with every function completely and successfully.

The hard-headed member of the board of education has a different viewpoint. He believes that the married woman teacher has turned her back on wifehood and motherhood, that she is in nowise better fitted for the calling of a teacher because she owns a marriage certificate, than does the single woman, and that in the nature of things she cannot simultaneously be a successful teacher, wife, and mother.

Nor does the same hard-headed board member think more favorably of the married woman teacher who assures him that she can teach school successfully and at the same time be a good wife to her husband. And as for the sacred office of motherhood—well, she can escape all that is implied in motherhood. Besides, that is nobody's business but her own. Such is the logic, too, of the high-minded sentimentalist who makes light of the established social order of things.

Finally, the hard-headed board member is fair minded enough to exempt the married woman teacher who happens to be a widow or who has an invalid husband to support. But he is unalterably set against the married woman teacher who has an able-bodied husband to support her, who teaches because she wants to escape the burdens of motherhood, who wants to help her husband to increase his pile of wordly belongings, or who merely wants more money for dress and fineries, and so on. He does not hesitate to exclude from the teaching service that kind of a married woman teacher.

The issue divides itself into two questions: First, shall character and ability alone determine the choice of a teacher? Or, second, shall the basic law in the social order be respected by giving consideration to the fundamental institution of life—the family?

There has been a disposition on the part of modern writers to hold to ridicule the school administrators who have barred the married woman teacher. We are not in sympathy with that method of discussing the subject, nor are we in accord with the sentimental diatribe which ignores the underlying motives and objectives of those called upon to decide the question.

Members of boards of education who have raised the wall against the married woman teacher must, primarily, be credited with an innate respect for the solid traditions of family life, with upholding the dignity of an orderly wifehood, and of rendering tribute to the sacred cause of motherhood. They do not favor the single woman for the sake of celibacy, or oppose the married woman in order to discredit marriage, but are actuated by a desire to foster the most precious aspiration in the American social structure, a well-ordered family life as the basic essential to education and government, and the stability and well-being of the nation.

THE CRY OF POLITICS IN THE PUBLIC SCHOOLS

It is quite the usual thing for those who are displeased with the action of school administrators to raise the cry of politics. And when the cry is sounded, one wonders just what it all means. At any rate, the impression is conveyed that somebody has engaged in some low, cunning, and selfish transaction. The word "politics" in its broader acceptation covers a multitude of sins, and is intended by those who employ it to carry a crushing indictment.

But, there are politics and politics. An applicant for a position may have employed the usual political tactics to gain favorable action. He deems his course a legitimate one. When he fails, he charges that illegitimate politics have been employed. It all depends upon whose ox has been gored.

The man who has something to sell to the school authorities may have pulled every political string at his command to effect a sale. Success is credited to legitimate effort. Failure is certain to raise the holler of politics.

The general charge that the administration of the American schools is dominated by politics is so frequently and persistently made that one begins to wonder what would happen if this were really true. It would be a calamity if it were even approximately true.

Fortunately, the charges are in the main untrue. Where ninety-nine school boards employ acceptable administrative methods, one does not. The American schools throughout are managed judiciously and with a spirit of fairness toward all concerned. No school administrator can please everybody, and none should try to do so. The schools serve one great purpose, and one only—to educate.

If the word "politics," as interpreted in our modern dictionaries, means the science of organization, then every school system is a political institution and every member of a board of education is a politician in the finer and better interpretation of that term. If a school system is an essential branch of government, then it follows, too, that its deliberations come within the category of the political. The question simply divides itself between correct procedure and incorrect procedure; between good politics and bad politics.

The newspaper and magazine writers of the day as a matter of expediency do not discriminate between the exceptional and the general, the unusual and the usual, the irregular and the regular. Let one school administrator engage in unacceptable tactics and all administrators are denounced. Let one board of education practice so-called "politics" and the cry of "politics" is raised against all boards of education. The unusual, irregular, and sensational have their popular appeal. The usual, the regular, and meritorious do not afford the same attractive reading matter.

American public opinion, on the whole, is well balanced and given to the exercise of common sense. It makes a due allowance for the sensational tendencies of a modern day and the flippant utterances of present-day magazine writers. Every community knows its own school administrators and trusts them; knows its own school system and is satisfied with the manner of its management; is not inclined toward distrust and dissatisfaction, but proud of its schools and their achievement.

CONSIDERATIONS IN THE SELECTION OF SCHOOL SITES

One of the most important, and frequently the most vexatious task imposed upon school authorities, is met in the selection of school sites. It not only involves the first-cost considerations in any new schoolhouse project, but also the problem of convenience of access, present and prospective. The cost concerns the taxpayer, and the location interests the school constituency. The one is concerned in price, the other in accessibility.

The problem becomes acute in growing communities where the most desirable sites are already covered with substantial structures, and where the business section is crowding into the residential areas. A location that is central today, so far as the school population is concerned, may no longer be central in ten years hence. Again, the trend and rate of population growth, and the school needs at the end of a given period, involve careful conjecture and planning.

With the advent of the automobile and the congestion of street traffic, new considerations come into play. In the horse-and-wagon days, little consideration was given to the matter of street traffic. In these days of rapid transit, the street dangers that confront the child have been increased a hundredfold. The thoughtful school administrator does not willingly locate a new schoolhouse upon a much-traveled thoroughfare. He prefers a neighborhood that is less frequented by street traffic.

Some of the troubles which arise out of site controversies are caused by those who are anxious to sell property to the school authorities. The resident who owns a fine home is not anxious to locate a schoolhouse next door, but the real estate dealer who seeks to promote a new residence section regards a fine schoolhouse as an asset. One class of objectors is found among those who live farthest away from the proposed school site. They do not want a schoolhouse in the immediate vicinity but want it located just within easy walking distance from

their homes. With its growing popularity the high school is now more frequently located on the outskirts of the town in order that larger grounds may be obtained for the building proper, and to enable the acquirement of athletic fields.

Much might be said as to the proper way of proceeding in the selection of a school site, but it nevertheless remains that every case has its local contingencies and obstacles. Much may be accomplished by a proper survey of the schoolhouse situation, present and prospective, in order that new locations may be wisely chosen. In a growing community where old schoolhouses from time to time become submerged by the crowding of commercial and industrial enterprises, and where new residential districts are being created, it is well to call the expert into action. A complete survey will enable the school authorities to act with greater circumspection and intelligence.

The editor of a Richmond, Ind., newspaper recently said: "Personally, this writer does not like the idea of having any kind of school in or near the heart of the downtown section. Such a location places boys and girls too near a variety of attractions that do not help the business of getting an education.

"But school days are primarily for the purpose of attending school and getting the work that is offered and required there. And downtown locations certainly do not make the task easier for teacher or pupil.

"Too, there is the element of space to be considered. At the outer edges of the city there is sufficient room to build properly in the most approved style of school architecture. There is room for outdoor athletic fields and the other necessities that go to make the up-to-date high school the most advanced type of public educational institution in the history of the world."

After all, the selection of school sites hinges largely upon a timely anticipation of future schoolhousing needs. It is frequently wise to select sites long before they are actually needed. This method, where practical, not only enables the selection of favorable sites but also usually results in a considerable saving of money.

A CODE OF ETHICS FOR THE TEACHING PROFESSION

In recent years there has been no lack of interest in a judiciously formulated code of ethics applicable to the profession of teaching. High-minded men and women have from time to time felt the need of a document that should define the relations between teacher and those that should obtain between the body of professional workers and the school authorities.

The result has been some well-phrased codes of conduct worked out by committees and adopted by state associations. Usually, these have been imbedded in printed proceedings and have been conveniently forgotten. The evils which they have sought to remedy have reasserted themselves with old-time frequency, and then someone wonders whether the present codes are not due for some revision. In brief, the question is whether they really strike the center spot. What does the profession believe to be truly ethical?

With this approach to the subject, a committee of the National Education Association, headed by Sarah T. Muir of Lincoln, Nebr., has been at work for the past four years to ascertain the professional sentiment on the subject. It recently made a report in which it bases its belief for the need of a code upon the following reasons:

1. The increased power and better training of teachers demands higher standards of professional conduct.

2. Those who have taken up the profession seriously are guided by worthy ethical principles in the main, but need support.

3. The working principles of those who look upon teaching as a profession should be made available to all in order that those who are entering the profession may have as a guide a definition of what a professional teacher is.

4. For the sake of the teacher himself and in the interests of education, there should be a formulated code of ethics and means established to give authority to the code.

It is further actuated by the belief that "Since a code of ethics can be of little avail without the acceptance of it by a large body of those whom it concerns, the committee bent its efforts to discover how much agreement could be found in a list of practices gleaned from various state codes and elsewhere."

In order to accomplish this, a questionary was sent to 3,145 professional workers to which 1,606 replies were received. These came from chief executives, administrative subordinates and classroom teachers, and proved valuable in that they revealed the unethical actions engaged in, thus suggesting the basis for a real code of ethics.

The frequency with which the unethical is engaged in is reduced to percentages and arranged to show the most common violations as well as those least common. At the head of the list of offenders is the school official "who fails to recommend one of his teachers for a position in another community because he does not want to lose her services." Another charge is "to dismiss, or recommend for dismissal, a teacher without giving her ample notice and opportunity to be heard."

In the list of charges of unethical conduct preferred against teachers appear the following: "To bid or underbid for a position. To break contract to accept another position. To go over the heads of one's superiors. To accept pay for tutoring one's own pupils. To apply for a position not known to be vacant. To solicit sample books. To accept gifts from pupils. To teach one's religious, political, or private beliefs to pupils. To enter a combination to force increases in salaries, etc., etc."

The committee is not prepared to submit a code of ethics before it has gone deeper into the subject, or at least before it has considered the violations by all those connected with a school system. Here it is contemplated to cover the actions not only of the professional workers, but also the administrative heads. This would mean a code of ethics applicable also to boards of education, superintendents, supervisors, and principals.

It is reasonable to assume that a code of ethics adopted by the National Education Association, the nation's leading body of professional workers, should be inclusive and comprehensive. It must be based upon an exhaustive study of the subject if it is to command the respect to which an official declaration of ethical practice made by the highest body of professional workers, to which it is entitled.

THE RELATION OF EDUCATION AND WEALTH

It was not until ships brought treasures to the shores of Phoenicia that the arts of that country gained distinction; it was not until the Hanseatic cities increased the wealth of central Europe that the sciences gained a foothold in Germany; it was not until the Elizabethan age when the merchant came into his own that the drama and literature of England came into recognition.

A paragraph in Frank Bruce's recent review of the school market says:

"America has witnessed the unusual spectacle of a growth in wealth entirely beyond all belief and certainly beyond all the experiences in the history of the world. While European municipalities and foreign countries have grown, and while the idea of wealth and progress is by no means new in the story of a world growing old, our American romance is remarkable in the volume of wealth, its diffusion and the luxury of a private home and a car for even the humblest working man.

"As we educate our people to life, we prepare them for the struggles of life, we stimulate demand for life and living, and prepare a new people ready and able to supply and conserve the new needs and wants of educated men and women of the country.

"This parallel of the growth of wealth and the growth of education has never been so effectively presented. While all the growth of wealth should not be attributed to education, the fact remains that men better prepared for life are better able to meet the struggle for existence. Our high-school enrollment is, therefore, not only a barometer of school business, but also an indicator of the standards of living, which prepare men to supply the needs of life and suggest new needs which must be supplied by a complexity of human machinery."

It is due to the natural resourcefulness of this country, together with the constructive ability of the American, that the educational activities of the nation have gained marvelous momentum and efficiency. Material progress forms the impetus to higher aims, and economic stability enables the realization of the finer privileges and aspirations of life.

The tremendous development of the high-school system in this country is accountable in part to the nation's phenomenal increase in prosperity and wealth. The community began with grade schools, modest in housing and meager in teaching ability. They rose to excellence and were augmented by the high school—senior, and junior. The children remained longer in the grade schools and entered in greater numbers the high schools. The attendance has reached unheard-of proportions. Popular education has never been disseminated in any country more thoroughly and with greater intensity.

Here is presented a strikingly conclusive demonstration that wealth and education are reciprocal factors. Education is a stimulant to wealth. In fact, it is the creator of wealth. It enhances the power of production and likewise increases the capacity for consumption. Education enables man to see more in life and living, and wealth enables him to embrace its compensations. In brief, education makes for wealth.

Thus, the American school has been the leading contributor to the nation's prestige, prosperity, and power, in that it trains for that ability which marshals the forces of nature and subjects them to the service of man. What might be deemed a fabulous sum; namely, two billion dollars, expended for popular education, becomes a minor fraction in the light of the nation's aggregate wealth. A nation whose total wealth is nearing the four hundred billion mark, with an annual earning of seventy-five billions, and a surplus of fifteen billions, is assured that it has received a splendid return upon its investment in education.

On the whole, the conclusion must be that the nation can well afford to maintain upon the present momentum and rate of cost. The American educator has manifested the same enterprise and energy that has characterized the merchant and the manufacturer. His school-expansion program is entirely in keeping with the American spirit.

USE AIR MAIL

The board of education of Los Angeles, Calif., through its business department, sends requests for quotations, purchase orders, and other correspondence by air mail. Mr. W. E. Record, business manager of the board of education, is convinced of the great economy of time which the air mail permits in the handling of school business with firms in the central west and on the Atlantic Seaboard.

Index of School-Bond Prices[1]

Harold F. Clark, Teachers College, Columbia University, New York, N. Y.

The net interest rate on all school bonds sold in July was 4.45 per cent. This is the highest rate for any month in the year 1928 and is almost up to the average rate for the entire year of 1927. The rate for July is .03 of one per cent higher than the rate for June. The net interest rate on all school bonds sold in April was the lowest of the year, 4.13 per cent. Each month since April has shown an increase. The total increase in the net interest rate during May, June, and July amounts to .32 of one per cent. As was suggested last month, the rate of increase cannot go on indefinitely.

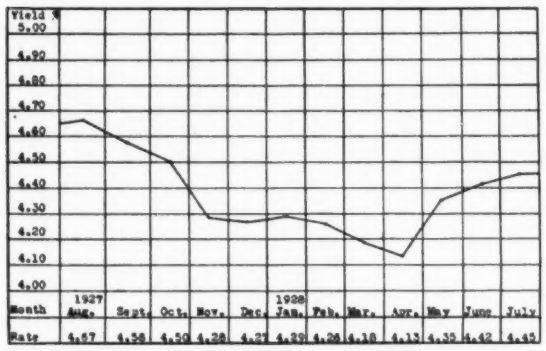


TABLE I. Average Yield of All School Bonds Sold During the Month

What the rate of interest on school bonds will be in the near future depends almost entirely upon the Federal reserve banks. Back in the early part of the year, the rediscount rate of the Federal reserve banks was 3.5 per cent. The net rate of interest on school bonds was approaching within one half of one per cent of this rate. The Federal reserve banks raised the rediscount rate from 3.5 to 4.0 per cent. This was raised to 4.5 per cent and finally to 5.0 per cent. The result was a rise in all kinds of interest rates. The inevitable result was that interest rates on school bonds went up with other interest rates. If the Federal reserve banks raise the rediscount rate again from 5.0 to 5.5 per cent, interest rates on school bonds will doubtless go up. On the other hand, if the Federal reserve banks lower the rediscount rate, as they must do sooner or later, the interest rate on school bonds will fall. Any opinion as to what the Federal reserve banks will do in the near future is more or less of a guess. But, if brokers' loans and loans against stock-exchange collateral can be reduced, it would not be unreasonable to expect the Federal reserve banks to lower the rediscount rate by fall or early winter.

TABLE II
Amounts and Yields of Bond Issues[2]

		July 1928
1.	School bonds sold during the month	$ 15,697,225
2.	All municipal securities sold during the year (to date)	878,374,000
3.	All school bonds outstanding (estimated)	3,342,000,000
4.	Average yield of all school bonds outstanding (estimated)	4.64%
5.	Yield of school bonds of the ten larger cities sold during the month	4.36%
6.	Yield of United States long-term bonds (Quotation the middle of May	3.44%

[2]The monthly total of school bonds does not include all the bonds issued in the month, due to the difficulty of obtaining the yields on some of the issues.

As is evident from the high interest rates that must be paid, the present is not a particularly good time to issue school bonds. Even though interest rates on short-time loans are higher at present than interest rates on long-term bonds, it would doubtless pay many cities to issue the short-term loans now and wait until interest rates are lower before issuing the long-term bonds.

The high bond issue in July sold for 6.24 per cent and the low issue sold for only 3.93 per cent. Only a few issues sold during the month for less than 4.0 per cent interest. Some weeks in the early spring almost half of the issues were selling for less than 4.0 per cent. When such large cities as Cleveland and Los Angeles are reported as having paid 4.36 per cent interest on bonds, interest rates are high. A few months ago such cities were selling their bonds around 3.90 and 3.95 per cent.

The total amount of school bonds sold during July was $15,697,225. This amount is less than the average monthly sales for the year. The high interest rates have doubtless been partly responsible for holding down the amount of the sales.

The state indexes showed slightly more than the usual variation during July. The school bonds sold in Massachusetts carried a net interest rate of less than 4 per cent. The bonds sold in Florida carried a net interest rate of about 6 per cent.

Sometimes the impression is given that school-bond sales are a major part of the total municipal-bond sales. But, the total school-bond sales during the year to date are only about $125,000,000 as compared with total municipal-bond sales of almost $900,000,000.

Table IV shows the rise in interest rate on long-term Federal government bonds. The preliminary estimate of the rate for July is the highest for the past twelve month. The recent government issue of bonds bearing 3⅜ per cent interest has been selling at a decided discount.

TABLE III

Year	Bond Sales[3] School	Municipal	All Public and Private	Average Rate at Which Bonds Were Sold Year	Municipal
1927	$274,000,000[4]	$1,450,000,000[4]	$7,735,000,000[4]	1927	4.47[4]
1926	260,000,000	1,365,000,000	6,311,000,000	1926	4.61
1925	323,000,000	1,399,000,000	6,223,000,000	1925	4.58
1924	288,000,000	1,398,000,000	5,593,000,000	1924	4.26
1923	208,000,000	1,063,000,000	4,303,000,000	1923	4.76
1922	237,000,000	1,101,000,000	4,313,000,000	1922	4.81
1921	215,000,000	1,208,000,000	3,576,000,000	1921	5.18
1920	130,000,000	683,000,000	3,634,000,000	1920	5.12
1919	103,000,000	691,000,000	3,588,000,000	1919	5.04
1918	41,000,000	296,000,000	14,368,000,000	1918	4.90
1917	60,000,000	451,000,000	9,984,000,000	1917	4.58
1916	70,000,000	457,000,000	5,032,000,000	1916	4.18
1915	81,000,000	498,000,000	5,275,000,000	1915	4.58
1914	42,000,000	320,000,000	2,400,000,000	1914	4.38

[3]By special permission based upon sales reported by the Commercial and Financial Chronicle.
[4]Not final.

PREVIOUS INDEX NUMBERS IN SCHOOLWORK

One would not expect a technic having as many obvious advantages as index numbers to have been completely ignored in the field of education. There have been occasional suggestions and attempts to apply index numbers to school problems. Up to the present time, however, there has been no systematic attempt to do so. Reference is made below to a few valuable pioneer attempts that have been made to apply index numbers to school problems.

Leonard P. Ayres in 1920 published "An Index Number for State School Systems" in which he says, "This volume presents an index number for measuring the effectiveness of state school systems. It is a composite of ten different elements, of which five are measures of the amount of education received by the children, and the remaining five are measures of the expenditure made to purchase this education."

W. Randolph Burgess in 1920 wrote "Trends of School Costs," which is built largely upon index number technic. He has the following to say regarding his method: "The method used in computing these figures for the salaries of county teachers is that of the index number. It is desirable to comment at this point on the characteristics of the method, because it will be used elsewhere throughout the book to measure the trend of wages and of prices. The index number, as a statistical device, is especially adapted to this particular purpose. The method of procedure in this instance was to secure and tabulate the figures for the average weekly salaries of women teachers in twenty rural counties. To secure the index number, a simple average was taken of the figures from the twenty counties for each year. Because of the constant use of the same counties, any change which appeared in the series from year to year was due not to a change in the number or kind of quotations but, almost certainly, to some real change in the level of teacher salaries."

John K. Norton in his book "The Ability of the States to Support Education" uses a form of index number to measure the ability of the state to support education. The study of the bulletin on "The Effect of Population upon Ability to Support Education" by the same author, uses a form of index number. There have been a great many attempts to interpret the increasing amount of money spent for education in terms of some general index number of prices. Other studies have applied the index number to various other aspects of educational procedure. The JOURNAL has published several short articles and some discussions of the use of index numbers.

Compared with the mass of material on index numbers in economics, the above material is very meager. A very brief reference to index numbers in other fields will suggest their untouched possibilities for education.

TABLE IV
Average Yield of Long-Term Federal-Government Bonds[5]

Past Twelve Months Month 1928	Rate %	Past Five Years Year	Rate %
August	3.46[6]	1927	3.464
July	3.48[6]	1926	3.544
June	3.40	1925	3.797
May	3.35	1924	4.010
April	3.32	1923	4.298
March	3.30	1922	4.301
February	3.36		
January	3.35		
1927			
December	3.34		
November	3.39		
October	3.43		
September	3.44		

[5]Taken from the Federal Reserve Bulletin.
[6]Calculated from the New York Stock Exchange quotations and not the final Federal Reserve Board average.

TABLE V
Security Prices and Yields[7]

Date 1928	Average Price of 228 Stocks	Average Price of 60 Bonds	Average Yield on 60 High-Grade Bonds
Aug.	211.3[8]	98.3[8]	4.52[8]
July	210.1[8]	98.2[8]	4.53[8]
June	210.2	98.5	4.50
May	221.8	99.7	4.42
April	215.2	100.3	4.38
March	203.0	100.5	4.37
Feb.	191.9	100.3	4.38
Jan.	195.6	100.3	4.38
1927			
Dec.	196.5	100.0	4.40
Nov.	189.0	99.7	4.42
Oct.	186.2	99.6	4.43
Sept.	191.1	98.0	4.45

[7]As reported by the Standard Statistics Company, Inc. Used by special permission.
[8]Not final.

Table V shows that the average prices of stocks have remained fairly constant since June.

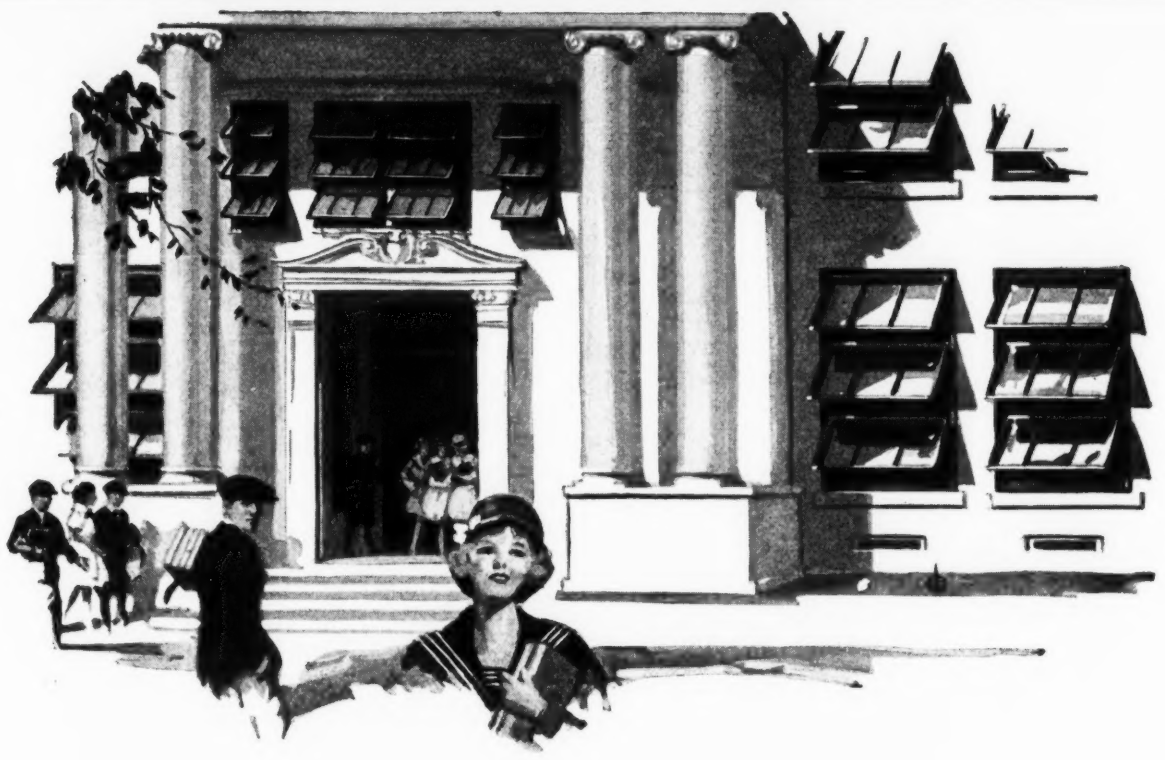
TABLE VI
Revised Index Number of Wholesale Prices[9]

Past Twelve Months Month 1928	All Commodities	Building Materials	Past Five Years Year	All Commodities	Building Materials
Aug.	98.1[10]	94.2[10]	1927	95.4	93.3
July	98.3[10]	94.1[10]	1926	100.0	100.0
June	97.6	93.9	1925	103.5	101.7
May	98.6	93.5	1924	98.1	102.3
April	97.4	92.5	1923	100.6	108.7
Mar.	96.0	91.0			
Feb.	96.4	91.0			
Jan.	96.3	90.8			
1927					
Dec.	96.8	90.4			
Nov.	96.7	90.2			
Oct.	97.0	91.6			
Sept.	96.5	92.1			

[9]United States Bureau of Labor Statistics, 1926=100.
[10]Not final.

(Concluded on Page 151)

[1]Copyright by Harold F. Clark.



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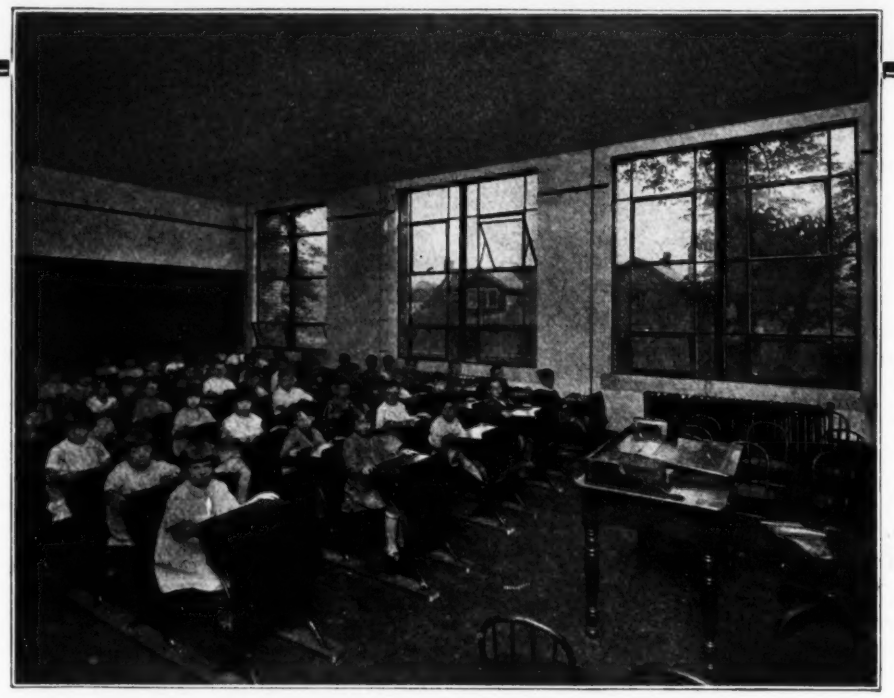
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SCHOOL LAW

School Lands and Funds

An act granting the city of Edison, Georgia, the right to condemn land for school purposes is held not to violate the state constitution requiring a uniform system of common schools (Georgia acts of 1923, p. 640, § 18B; Georgia constitution, art. 8, § 1).—Sheppard v. City of Edison, 142 Southeastern Reporter 535, Ga.

A law establishing a new apportionment of school funds according to the assessed value as respected certain percentage is held unconstitutional (Michigan public acts 1925, No. 53; Michigan constitution, art. 11, § 9, as amended in 1911.—Board of education of City of Detroit v. Fuller, 218 Northwestern Reporter 764, 242, Michigan, 186.

Schools and School Districts

The legislature has plenary power to establish, and divide the state or counties into school districts.—Ward v. Pelton, 5 Southwestern Reporter (2d), 315, Ark.

A subsequent classification statute is held not to affect the validity of the organization of a school district for the purpose of determining the tax rate (Missouri revised statutes of 1919, §§ 11123, 11236, 11237; Mo. constitution, art. 10, § 11.—State ex. rel. Reynolds v. Rickenbrode, 4 Southwestern Reporter (2d), 436, Mo.

An election favoring the consolidation of school districts does not make the consolidation final, but the county board of education may divide the district and provide an election for trustees of each district (Park's annotated civil code supplement of 1922, § 1437o, 1437p, 1437q).—Strickland v. Benton, 142 Southeastrn Reporter, 671, Ga.

To invalidate a county-school superintendent's order transferring the territory from one district to another, the evidence must clearly preponderate against his decision (Rem. complete statutes. §4727).—School Dist. No. 88 of Lincoln County v. Morgan, 266 Pacific Reporter, 150, Wash.

School-District Government

The Superior court is held without jurisdiction of proceedings to contest the election of a school director (rem. complete statutes, §§ 5366-5382).—Malinowski v. Tilley, 266 Pacific Reporter, 166, Wash.

A contest between candidates for a school directorship is governed by the same statute as other contests (Pa. statutes of 1920, § 10090).—Appeal of Armstrong, 141 A. 633, Pa.

The office of school-board member elected for a school district becomes vacant on a member's removal from the district, but not on removal to another ward within the district (Wis. statutes of 1925, §§ 17.03, 40.17 [1], 40.18, 40.24, 40.46).—State v. Gora, 218 Northwestern Reporter, 837, Wis.

The school-district treasurer is custodian of insurance funds paid on the destruction of a school building (Wis. statutes of 1923, § 19.01. and § 40.19, subsec. 2).— School Dist. No. 1 of City of Hayward v. Larson, 218 Northwestern Reporter, 847, Wis.

The evidence is held to sustain a finding that the money of a school district was deposited in the bank by the treasurer and lost by reason of his breach of duty, rendering the treasurer and his surety liable for the resultant loss.—School Dist. No. 1 of the City of Hayward v. Larson, 218 Northwestern Reporter, 847, Wis.

The surety of a treasurer is held liable for the loss of insurance money by a bank failure, notwithstanding the fact that the money was collected before the execution of the bond, where it remained in the bank thereafter, and the bond covered the whole term of office.—School Dist. No. 1 of City of Hayward v. Larson, 218 Northwestrn Reporter, 847 Wis.

That the school-district treasurer exercised due diligence does not relieve the surety from liability for a loss of school funds.—School Dist. No. 1 of City of Hayward v. Larson, 218 Northwestern Reporter, 847, Wis.

School-District Property

A change of location of the school building will not be interfered with by the courts on the ground that improvements have been made under the belief that the location was permanent, and that the change will deprive the petitioners of property without due process.—State v. Spokane School Dist. No. 81, Spokane county, 266, Pacific Reporter, 189, Wash.

In the absence of an abuse of discretion, the courts may not review the conclusions of the board in first-class districts relative to changing the building location.—State v. Spokane School Dist. No. 81, Spokane county, 266 Pacific Reporter, 189, Wash.

The New York City board of education has charge and control of a high-school building and appurtenances.—Lessin v. Board of Education of City of New York, 161 Northeastern Reporter, 160, 247 N. Y. 503, affirming judgments 225 N. Y. S. 856, 222 App. Div., 667, N. Y.

The duty of a board of education to control a school building is a corporate duty, for dereliction in discharge of which there is corporate responsibility (Greater New York Charter, 1055; New York Education Law, § 868, subd. 3).—Lessin v. Board of Education of City of New York, 161 Northeastern Reporter, 160, 247 N. Y. 503, 232 App. Div. 667, N. Y.

The duty of a board of education to control a school building cannot be delegated (Greater New York Charter, § 1055; Education Law, § 868, subd. 3).—Lessin v. Board of Education of City of New York, 161 Northeastern Reporter, 160, 247 N. Y. 503, 232 App. Div., 667, N. Y.

The Dallas board of education may employ special counsel in litigation involving the integrity of a rule or regulation deemed necessary for schools (Dallas City Charter, art. 4, § 1).—Chrestman v. Tompkins, 5 Southwestern Reporter (2d) 257, Tex. Civ. App.

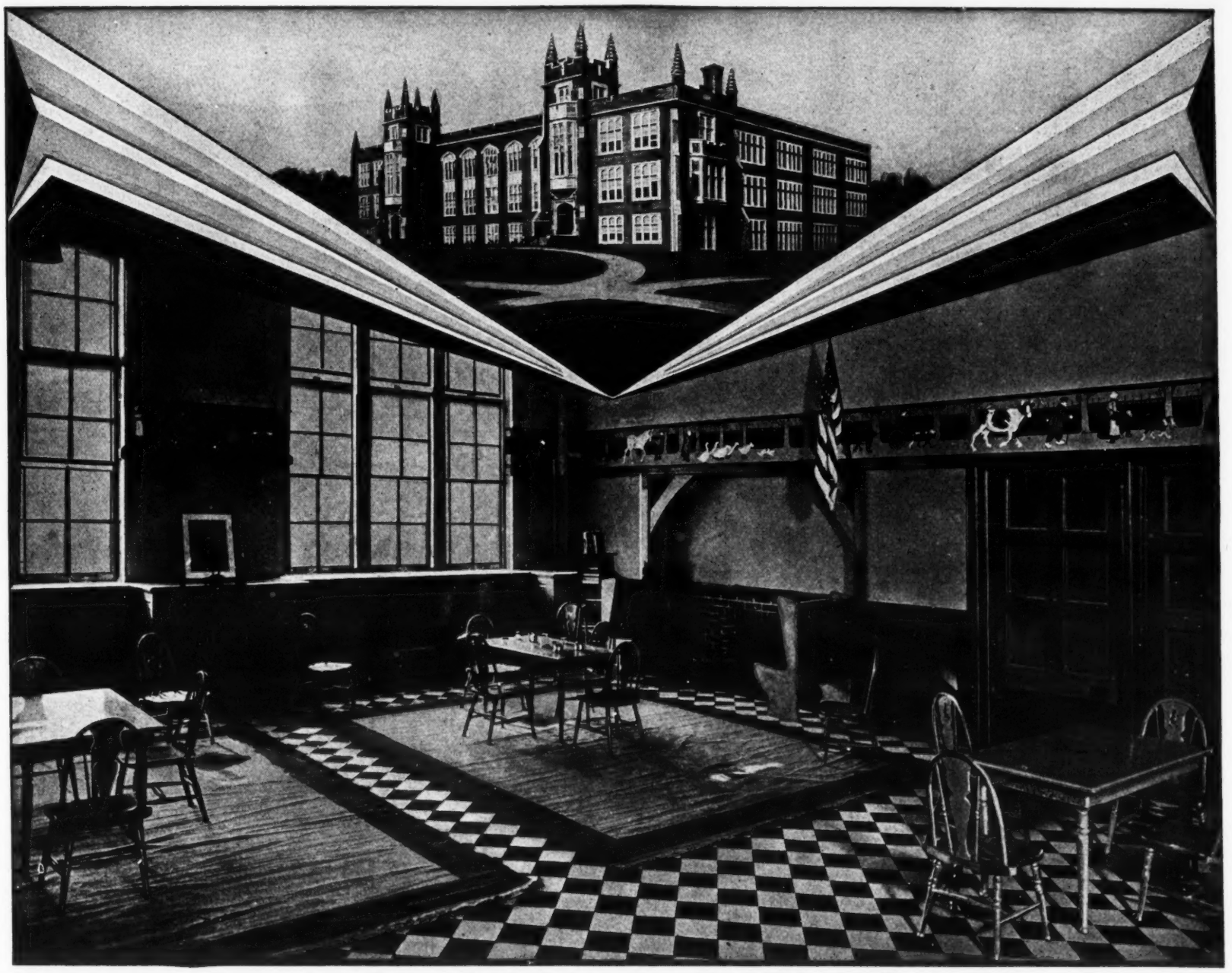
The Dallas board of education is held empowered to employ special counsel to defend a suit for an injunction against a rule requiring pupils to be vaccinated and to pay a fee from the general school fund (Dallas City Charter, art. 4, § 1).—Chrestman v. Tompkins, 5 Southwestern Reporter (2d), 257, Tex. Civ. App.

Where a contractor fails to give a statutory bond, such a fact cannot be used by him as a defense against a breach of contract (Texas revised statutes of 1925, art. 5160).—State v. Scholz Bros., 4 Southwestern Reporter (2d), 661, Tex. Civ. App.

The employees of a board of education, knowing that an elevator constituted a danger to persons using the sidewalk, must exercise "reasonable care" to remove the danger.—Lessin v. Board of Education of the City of New York, 161 Northeastern Reporter 160, 247 New York 503, affirming judgments 225 N. Y. S. 856, 222 App. Div., 667. N.Y.

The New York City board of education is responsible for an agent's failure to properly discharge the functions of caring for the school buildings.—Lessin v. Board of Education of the City of New

(Concluded on Page 70)



COSSITT AVENUE SCHOOL, La Grange, Ill. *Architects:* Childs and Smith

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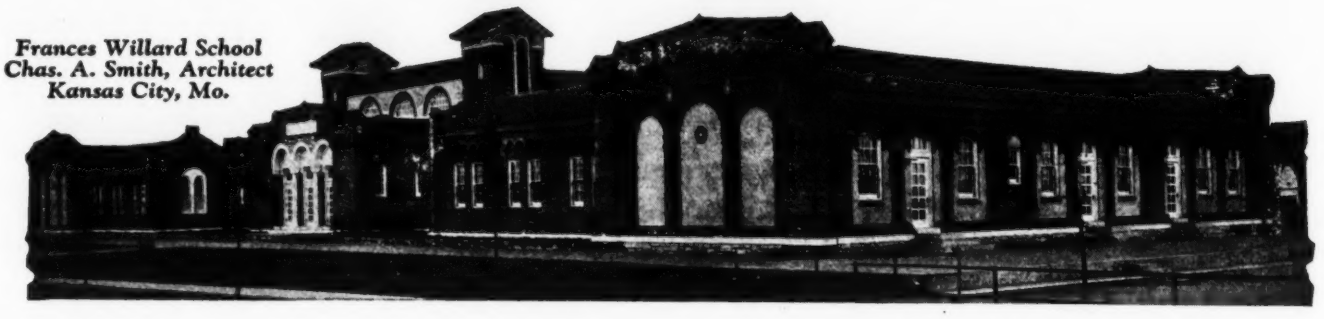
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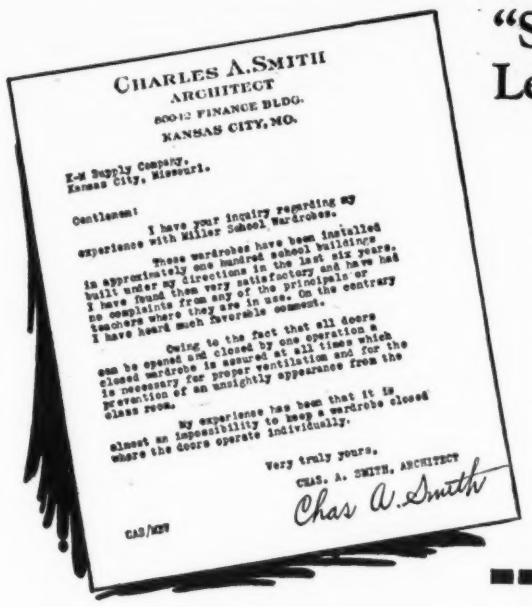
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(Concluded from Page 68)

York, 161 Northeastern Reporter, 160, 247 N. Y. 503, affirming judgments 225 N. Y. S. 856, 222 App. Div., 667, N. Y.

A notice to employees of the New York City board of education as to the dangerous condition of an elevator in a school building is a notice to the board.—Lessin v. Board of Education of the City of New York, 161 Northeastern Reporter 160, 247 N. Y. 503, affirming judgments 225 N. Y. S. 856, 222 App. Div. 667, N. Y.

School-District Taxation

The statutes are held not to restrict the deposit of school funds in a bank until the depository has been selected therefor as required by the statute (Minn. constitution, art. 9, § 12; Minn. general statutes of 1923, §§ 2833, 2834, 2836, 2837).—Farmers' & Merchants' State Bank of Ogilvie v. Consolidated School Dist. No. 3, Kanabec county, 219 Northwestern Reporter, 163, Minn.

The confirmation of school-district bonds is held properly refused, where the votes favoring the bonds, after deducting unlawful votes, failed to constitute two thirds of the votes cast (Code of school laws, § 143).—Trustees of St. Clair School Dist. No. 10 v. Broxton, 142 Southeastern Reporter, 575 Ga. App.

The exercise of discretion of school trustees to issue bonds voted for is not defeated by the lapse of time, unless changes of conditions render the bond issuance unnecessary or inequitable (Ga. constitution, art. 10, § 5, as amended in 1927, 35 statutes at large, p. 177).—Trustees of St. Clair School Dist. No. 10 v. Broxton, 142 Southeastern Reporter, 575, Ga. App.

A dollar tax rate adopted by popular vote in a school district containing an unincorporated town and organized before a statute was enacted classifying districts, is held valid, notwithstanding a subsequent consolidation (Mo. revised statutes of 1919, §11123, 11236, 11237, 11255; constitution art. 10, §11).—State ex. rel. Reynolds v. Rickenbrode, 4 Southwestern Reporter (2d), 436, Mo.

School-District Claims

In an action for injuries to a boy falling into an elevator shaft from the sidewalk by a school, evidence is held to justify a finding that the employees of a board of education did not exercise "reasonable care" to remove the danger.—Lessin v. Board of Education of City of New York, 161 Northeastern Reporter 160, 247 N. Y. 503, affirming judgments 225 N. Y. S. 856, 222 App. Div. 667, N. Y.

Pupils

The Dallas board of education has authority to require the vaccination of pupils (Dallas City Charter, art. 5, § 1).—Chrestman v. Tompkins, 5 Southwestern Reporter (2d) 257, Tex. Civ. App.

A schoolmaster stands in loco parentis, and may administer reasonable chastisement to a child.—Roberson v. State, 116 Southern Reporter, 317, Ala. App.

DECLINE IN BIRTH RATE TO STABILIZE SCHOOL ENROLLMENTS

Mr. Frank M. Phillips, statistician of the U. S. Bureau of Education, in a recent statement, points out that elementary-school enrollments will soon reach a stationary period, due to a decrease in the birth rate and decrease in infant mortality. Mr. Phillips points out that rises in expenditures in the past have followed rises in enrollments. The completion of building programs and the reduction in the rate of increase in daily attendance may be expected to materially reduce the expense of new school buildings, according to Mr. Phillips.

A number of graphs have been prepared which show the total expenditures per pupil in average daily attendance in public schools, the current expenditures per pupil, and the average daily attendance. These show moderate increases previous to 1918, then rapid increases until 1922, and then a gradual slowing up in increases after 1922.

All three of the graphs show a tendency to reach a maximum height in a short time. The graph for average daily attendance shows a tendency to reach a limit due to a decrease in the birth rate and to other factors which have an influence. A projection of these graphs by mathematical analysis gives a prediction of what may be expected to take place within the next few years, provided the factors which have governed the increases during the past ten years continue to function in the same manner in the near future.

The conditions which affect per-capita costs based upon average daily attendance will bear some study. The reduction in the birth rate is a factor that may not be overlooked. The rate has dropped from 25.1 per thousand population in 1915 to 20.6 in 1926. The registration area included 31 per cent of the whole population in 1915, and 76 per cent in 1925.

Infant mortality rates have dropped materially during the ten-year period. The rate was approximately 102 per thousand live births in 1915, and 71.7 in 1925. Applying the birth rate and the infant mortality rate for each year, this means that 22.5 children per thousand of the population reached the age of 1 year in 1916, and less than 20 per thousand in 1926. Applying the same rates to the estimated population for each year indicates that 2,239,000 children reached their first birthday in 1916, and 2,292,000 reached it in 1926. This is an increase of a little over 50,000 in ten years.

Any material decrease in the birth rate will in time have its influence upon the number of children who are old enough to enter school for the first time each year. Restricted immigration further reduces the number of 6-year-olds. It is evident that the number of 6-year-old children is not increasing rapidly from year to year. The 1930 census may show little, if any, increase in the number of children ready to enter school over the number shown in the 1920 census. If these conditions exist for a number of years, school enrollments will reach a stationary period, especially in the lower grades.

One item in the rapid increase in total expenditures of recent years has been the increase in the amount expended for grounds, buildings, and contents. Capital outlays were costing about $7 per pupil in average daily attendance annually from 1916 to 1918. These costs gradually increased up to 1925, and then decreased in 1926.

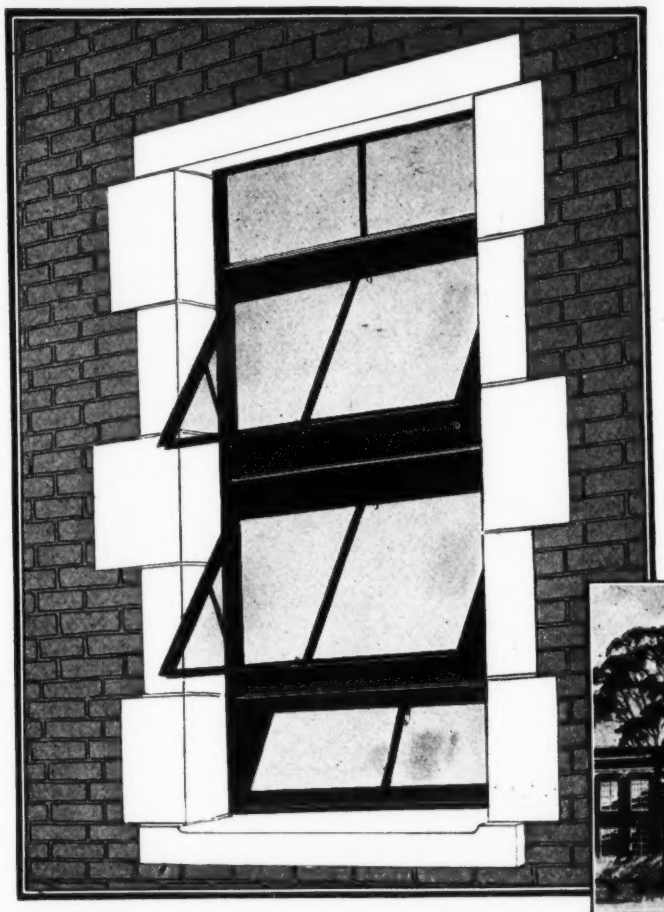
Factors which may be expected to decrease capital outlays materially from year to year are: (1) the completion of school-building programs delayed because of high building costs, and (2) the reduction in the increase in number of pupils in average daily attendance.

Promotion rates have improved in recent years, and this has tended to relieve a certain amount of congestion in the lower grades.

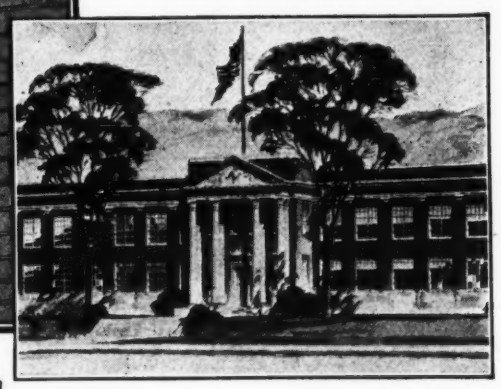
—Supt. Frank Hendry of Royal Oak, Mich., has been retained as superintendent of the new city district of Detroit. In the reorganization of the district, Royal Oak becomes a city district of the third class.

—Supt. D. O. Groce of Festus, Mo., has entered upon his seventh consecutive term. Principal C. A. Schnadt of the high school, has completed his fifth year of service.





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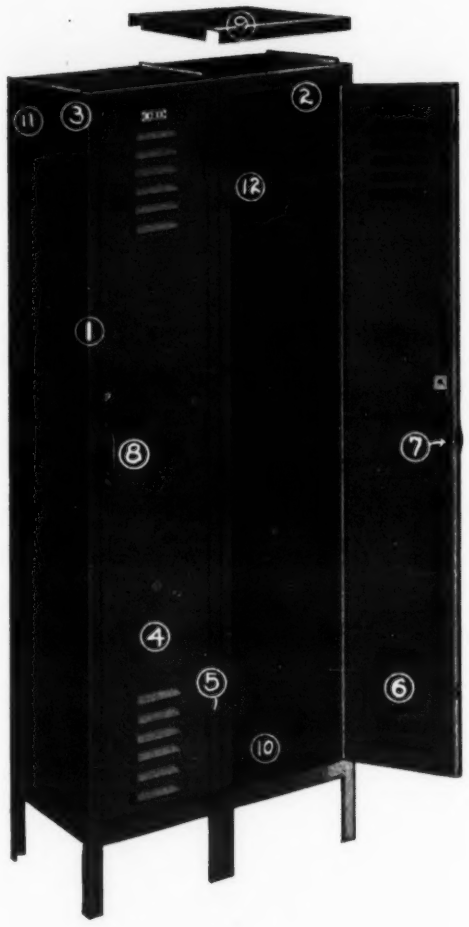
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SCHOOL BOARD NEWS

FAILURE OF ELEMENTARY-SCHOOL ENROLLMENT TO KEEP PACE WITH POPULATION GROWTH

Increases in enrollments in elementary schools since 1890 have not kept pace with increases in the general population, according to Mr. Frank M. Phillips, chief of the division of statistics of the Bureau of Education of the U. S. Department of the Interior.

According to Mr. Phillips, the percentage of the whole population enrolled in public schools in 1890 was 20.3; while in 1926, it had increased to 21.1. The greatest increase is shown for the secondary schools, the percentage of gain being 1,055. Enrollments in collegiate departments of colleges and universities increased 529 per cent from 1890 to 1926. A general gain in enrollments in public schools over those in private schools during those years is reported by Mr. Phillips.

Approximately 89 per cent of the enrollments included in the grand total enrollment in schools in the United States are in schools under public control. The statistics show a gain in enrollments in schools under public control over those under private control for almost the whole period. Since 1920, schools of higher education, including those for teacher training, show slight gains for schools under private control. The decrease in percentage enrollments in public schools for 1926 is perhaps due to better figures from private schools for 1926 than for previous years.

In 1890 the per cent of the whole population enrolled in public schools was 20.3 per cent, in 1926 it was 21.1 per cent. During this period the per cent of those enrolled who were in high schools increased from 1.6 per cent to 15.2 per cent. Increases in enrollments in elementary schools, therefore, have not kept pace with increases in the general population. Enrollments in elementary schools increased 63 per cent in 36 years, while the general population increased 87 per cent. The school population, those of ages 5 to 17, inclusive, increased 62 per cent during this period.

The greatest increase is in secondary-school enrollments. This amounts to 1,055 per cent from 1890 to 1926. The enrollment for the base year, 1890, is perhaps not quite complete for secondary schools, but the deficiency is offset in large measure by the fact that a few schools enrolled some elementary pupils in their high-school departments. Secondary schools now enroll about 53 per cent of those of secondary-school age, and still have room to grow, but the indication is that the rate of growth will constantly decrease, provided social and economic factors remain relatively as at present.

In recent years there has been a tendency to include the upper-grade elementary schools with the high-school grades, and to reorganize these into junior and senior schools and departments. These reorganized schools have had a wonderful growth. The number of junior high schools and junior departments in junior-senior high schools taken together totaled 3,058 in 1926.

The per cent of total enrollments in schools under public control, 1890 to 1926 is as follows:

	1890	1900	1910	1920	1926
Elementary	89.2	92.3	92.1	92.9	90.7
Secondary	60.4	73.8	82.9	89.5	91.6
Normal schools	77.3	66.5	89.5	95.8	93.6
Colleges	13.0	31.0	36.6	39.2	36.6

VOTING AT SCHOOL ELECTIONS

The eligibility of citizens to vote for school-board members has been brought into discussion at Binhampton, N. Y. George S. Hooper, clerk of the board of education, gives the following outline of the law determining upon persons entitled to vote at school elections.

1. A citizen of the United States.
2. Twenty-one years of age.
3. An inhabitant of the state for one year next preceding the election and for the last four month a resident of the county and for the last thirty days a resident of the election district in which he or she offers his or her vote. If a naturalized citizen, such person must, in addition to the foregoing provisions, have been naturalized at least ninety days prior to the election or, if a citizen by marriage, must have been an inhabitant of the United States for five years and married ninety days prior to such day. In case of a person who became entitled to a vote in this state by attaining majority, by naturalization or otherwise after January 1, 1922, such person must, in addition to the foregoing provisions, be able, except for physical disability, to read and write English. In addition to the foregoing provisions, a person, to be entitled to vote at a school election in such city, shall possess one of the following four qualifications:

a) For thirty days next preceding the election at which he or she offers to vote has owned or hired real property in such district or has been, during such thirty days, in the possession of such property under a contract of purchase, assessed upon the last preceding assessment roll of the city, but the occupation of real property by a person as a lodger or boarder shall not entitle such person to vote, or

b) Is the parent of a child of school age, provided such child shall have attended the public schools in the city in which the election is held for a period of at least eight weeks during the year preceding such election, or

c) Not being the parent, has permanently residing with him a child of school age who shall have attended such public schools for a period of at least eight weeks during the year preceding such election, or

d) Owns personal property, assessed on the last preceding assessment roll of the city, exceeding $50 in value, exclusive of such as is exempt from execution.

AMONG BOARDS OF EDUCATION

—Commissioner of Education Charles H. Elliott, of the New Jersey State Education Department, has recently upheld the action of the Bayonne board of education in dismissing Samuel Hill, assistant custodian of the junior high school. The position was discontinued by the board of education on March 1. The commissioner held that it was within the discretion of the board in the interest of economy to determine the positions to be eliminated, and the employees to be dismissed.

—Battle Creek, Mich. Through its attorneys, the board of education has taken steps to appeal a recent ruling of the court which held that the school board had no legal right to raise money by taxation for the building of new schools, and that the Calhoun supervisors were within their rights in cutting $200,000 from the estimate of tax money needed for the year by the school district.

(Continued on Page 75)



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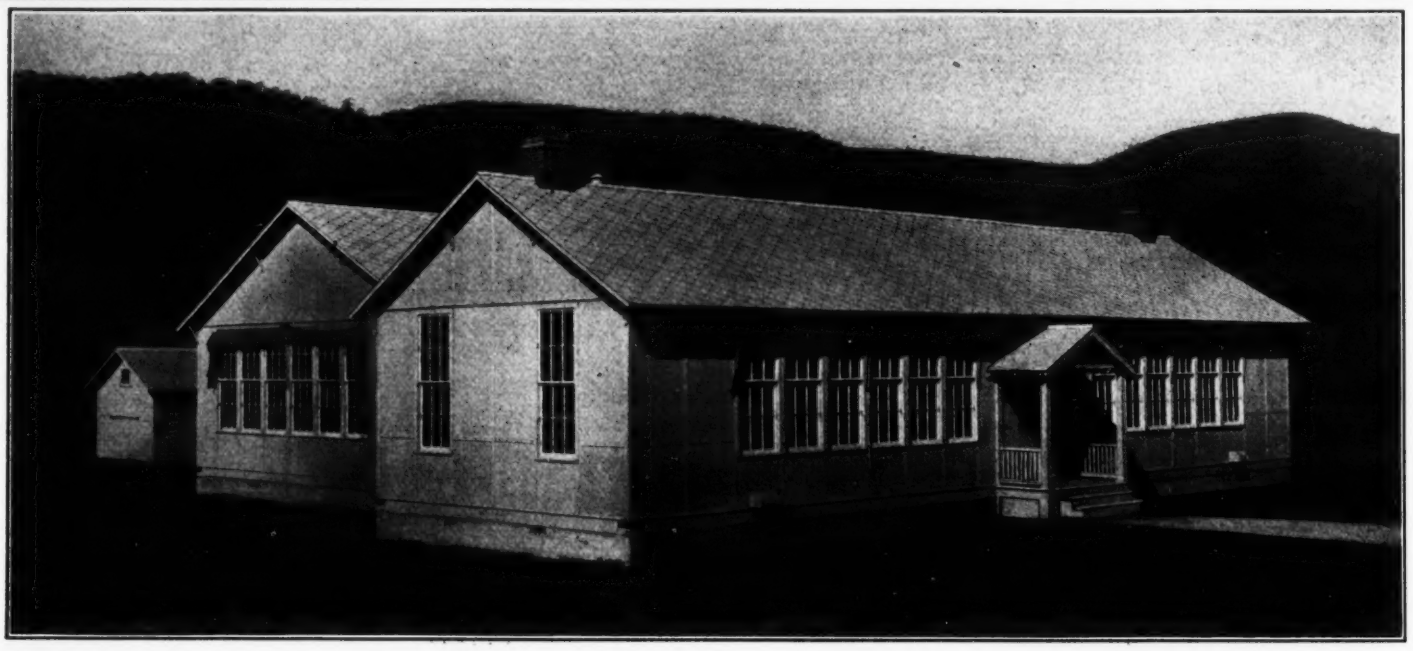
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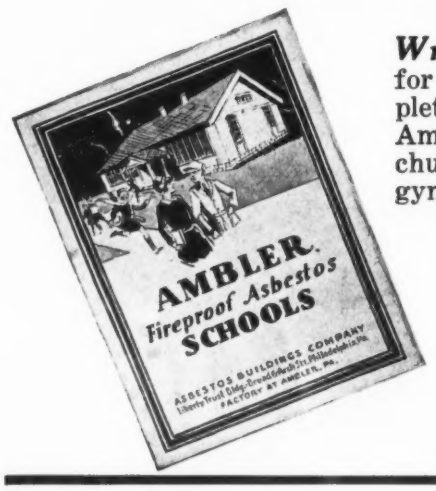
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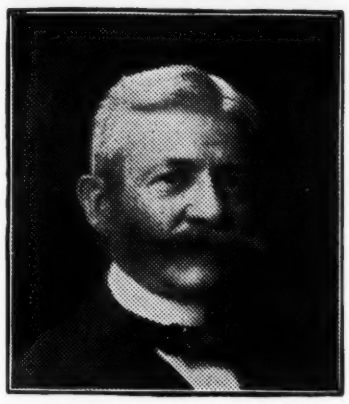
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(Continued from Page 72)

The attorneys acting for the board of education, take exception to certain findings of fact and to the principal findings at law made by the court. It is pointed out that the court failed to pass on certain points of law as requested.

—Augusta, Ga. Upon the recommendation of a special committee, the school board has purchased an audiometer for testing the hearing of school children.

—The supreme court of Minnesota has rendered a decision to the effect that the Mankato board of education has power to erect school buildings and to purchase equipment for bids. The court, in its decision, upheld a special law of 1878, which designates the area as a special school district.

—Marion, Ind. Center township has been ordered by the Grant Circuit Court to pay Mr. Albert J. Wilson $2,720 for bonds for the construction of a township school during the year 1877. The township failed to make a settlement at the termination of the bonds in 1881. There were four $500 bonds, and the remaining sum ordered paid was for interest during the allotted time.

—"If you ask me to define education, I'll tell you that I cannot do so," said President John Kendrigan of the board of education of Ashland, Wis., in a recent address before a boys' camp. "You cannot define education, but you can tell whether a man is educated by his mannerisms and by the way he talks."

—A candidate for the legislature from Knox county, Tenn., has been asked to change the law creating the school board of Knoxville, Tenn. His reply was: "Knoxville has a good board of education and a splendid school system. I don't think it could be made better by legislation."

—Because the committee on teachers and textbooks has been at loggerheads with the superintendent, the school board of Conshohocken, Pa., has abolished the committee.

—Louis Mason, Joseph Mason, and Louis Dinger, members of the school board of West Paterson, N. J., who missed three consecutive meetings of that body, have been asked to show cause why they should not be removed from office. This action is in accordance with the state law.

—The school board of San Antonio, Tex., has held no meetings since last March owing to several controversial issues. One of the troubles arose over the dismissal of a school principal by the old board. The new board has been unable to agree.

—Mr. William D. Barry has been elected a member of the board of education at Roselle Park, N. J., to succeed Mr. Joseph Whittaker.

—The school district of Royal Oak, Mich., has been reorganized as a city district of the third class of Detroit. The change increases the membership of the board from five to seven, and enlarges the boundaries of the district.

—Muskego, Mich. The board of education has renewed $34,000 worth of fire insurance, $30,000 of which has been placed with local concerns, and $4,000 of which was given to agencies for the first time. The school system carries a total of $796,200 in fire insurance on the school buildings and pays an annual premium of $2,700 on this insurance.

—Battle Creek, Mich. The board of education has taken steps to appeal a recent decision to the Calhoun County Court, in which the court held that money could not be raised for the construction of school buildings without a vote of the citizens. The court held that the board of supervisors of Calhoun county was within its rights in cutting $200,000 from the budget of the school board.

—Bayonne, N. J. A decision by Dr. Charles H. Elliott, commissioner of education, upholding the action of the board of education in refusing to have recorded in its minutes an unseconded resolution of a board member, has been sustained by the state board of education. Dr. Elliott pointed out that recording of the resolution would serve no useful purpose.

—Ansonia, Conn. The school board recently voted down a proposed amendment to the by-laws whereby every session of the board would be an executive session.

—Lima, Ohio. The school board has adopted a school and library budget amounting to $676,951.08 for the year 1929. The budget anticipates a levy of $9.18 on each $1,000 in taxable property, as compared with the levy of $9.56 for 1928, or .38 mills reduction in the levy. The budget includes a bond-retirement fund of $108,608 for the retirement of the bonded indebtedness during 1929.

—Chillicothe, Ohio. The school board has approved a budget amounting to a total of $289,850. The budget includes a levy of $24,000 to take care of unsold building bonds.

—In the interest of economy, the school board of Clinton, Iowa, has reduced the budget from $378,000 to $369,000.

—Fargo, N. Dak. The school board has adopted a budget amounting to $619,950. The sum of $544,950 has been levied for school purposes during the school year, which is an increase of $19,700 over last year's levy.

—Dennison, Ohio. The school board has approved its 1929 school budget amounting to $89,587.37. The total is $1,475.11 less than the budget of 1928.

—East Aurora, Ill. A total tax levy of $575,000 has been adopted by the board of education. Of the total, $410,000 is for educational purposes, and $165,000 for building purposes. The amount of the tax levy last year was $437,432.

—Indianapolis, Ind. The average cost of educating children in the public schools increased $1.65 in the school year which ended in June, according to the annual report of the school commissioners. In 1926-27 the average cost for all pupils was $104.92. In 1927-28 it was $106.57 for 48,011 pupils. The school board spent for actual conduct of the schools in 1927-28, a total of $5,116,343 as compared with $4,883,216 in 1926-27, an increase of $232,282.

The city-wide expenditures for all school purposes, including the items of debt, building construction and operation, and improvement of libraries were as follows: 1927-28, $11,936,524; 1926-27, $8,791,021.

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—Ernest C. Hartwell, Superintendent of Schools, Buffalo, N. Y.

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The total instruction expense amounted to $3,860,937 in 1927-28, as against $4,149,064 in 1926-27. The maintenance cost dropped from $316,888 to $274,838 in 1926-27. Operating costs increased from $491,722 in 1926-27, to $514,659 in 1927-28. Administration costs dropped from $213,967 in 1926-27 to $177,781 in 1927-28.

The city schools spent $1,479,004 for new buildings and additions this year, as against $1,894,929 last year.

The average cost per pupil in the high school was $152.41, while the average cost for the common schools was $86.28 per pupil.

—The state education department of Idaho has purchased the $100,000 bond issue voted a few months ago for the new school buildings at Moscow, at 4½ per cent interest. The school district is assured a bonus of $1,200.

—Evanston, Ill. The school district has adopted a budget and tax levy amounting to $903,516, which is considerably less than the appropriation of $1,036,000 for the fiscal year 1927-28. Of the total, $636,360 is for educational purposes, $216,155 for building purposes, $31,000, from the state fund, and $20,000 from a lease.

—Akron, Ohio. The school board has adopted a budget for the year 1928-29, amounting to $4,359,500. The budget is an increase of $223,500 over that of last year.

—Amityville, N. Y. The school board has adopted a budget of $131,880, which is a reduction of $7,565 over that of last year.

—Green Bay, Wis. The board of education closed its fiscal year on July 1 with a deficit of $3,508.54, a good showing since the board had expected a deficit of $25,000. The budget of the board submitted to the city council was reduced $25,000.

—Salem, Ohio. The school budget for 1929 calls for expenditures amounting to $184,260, which is a reduction of $13,380 over that of last year.

—Proviso, Ill. The school board has adopted a tax levy of $600,000 for the next school year, which will yield between $525,000 and $550,000.

—Cincinnati, Ohio. The 1929 budget of the school board shows an increase of $500,000 over last year. The increases in the several items total $690,000, but are offset by a decrease in other funds of $190,000.

—North Tonawanda, N. Y. The school board has adopted a budget of $257,350 for the next school year. Based on an estimated assessed valuation of $23,500,000 for the city, the school-tax rate for 1928-29 will be $10.95, which is a decrease over the rates for the last two years. The school-tax rate for 1927-28 was $12.06, and that for 1926-27 was $14.48.

—Danville, Va. The school board has asked the city council to absorb an operating deficit of $92,272 remaining on the school board's books at the end of the school year ending June 30. The deficit is a heritage which has gradually accumulated over a period of twenty years.

—Minneapolis, Minn. The operation of the public schools will consume almost 29 cents of every dollar collected in taxes during the next year, according to a distribution of the tax dollar compiled by the city statistician.

—The secretary of the school board of Shelby, Mich., finds that many pupils have not paid their last year's book and tuition accounts. An effort will be made to secure a settlement before the fall opening of schools.

—Commissioner Charles H. Elliott of New Jersey has ruled that the Hissborough school board is without authority to negotiate a loan for a school site, and has ordered that the board discontinue irregularities in the transaction of its school business.

The case was brought before the commissioner on an appeal by Edward Linstrom, a member of the board, who contested the purchase of a site by a special committee which had been appointed during the term of a former board. It was shown that the president of the board had borrowed money from the bank in anticipation of the bond issue and had acted without authority of the board.

—Attorney General W. M. Brucker of Michigan, has ruled that the money of a school district may be deposited in a bank of which a member of the board is a stockholder, if the member does not designate the bank. The attorney general holds that there is no way in which a school board can proceed legally to borrow money from a bank of which one of the directors is a stockholder. The decision was given in response to an inquiry from Ferndale.

—Dr. John D. McCarthy, director of health education in the New York City schools since February, 1928, died of pneumonia on July 31, at the Mt. Vernon Hospital. Prior to his appointment, Dr. McCarthy was chairman of the department of hygiene at the DeWitt Clinton High School.

—The school board of Newport News, Va., says that all children must be vaccinated well in advance of the fall opening of the schools. Under the school law no child can be admitted to the schools without first showing a proper vaccination scar.

—The board of education of Iron River, Mich., has opened two additional playgrounds. The Iron River Reporter says:

"Two essential things the board of education has provided: A safe place to play and safe apparatus for all age groups. These essentials have been augmented by a play director who assumes responsibility, especially for the smaller children, parents intrust to his care. School officers, it appears, by proceeding with this program, have provided the city with a need that has been stressed many times but never filled. The success of other districts with organized play classes should have been lesson enough for quicker action. All children inherit the right to play. That they may do so now, from morning until night, and in places where they may enjoy the maximum of fun without danger to themselves or worry to their parents, is a creditable step by school-board members."

—"Because a child or man has a crippled body does not necessarily mean that he has a crippled intelligence," said Harry Filer before the Rotary Club, at Shenandoah, Pa. "On the other hand, many men who were cripples physically were intellectual giants." The Rotary has voted to support the local school board in securing recreational grounds.

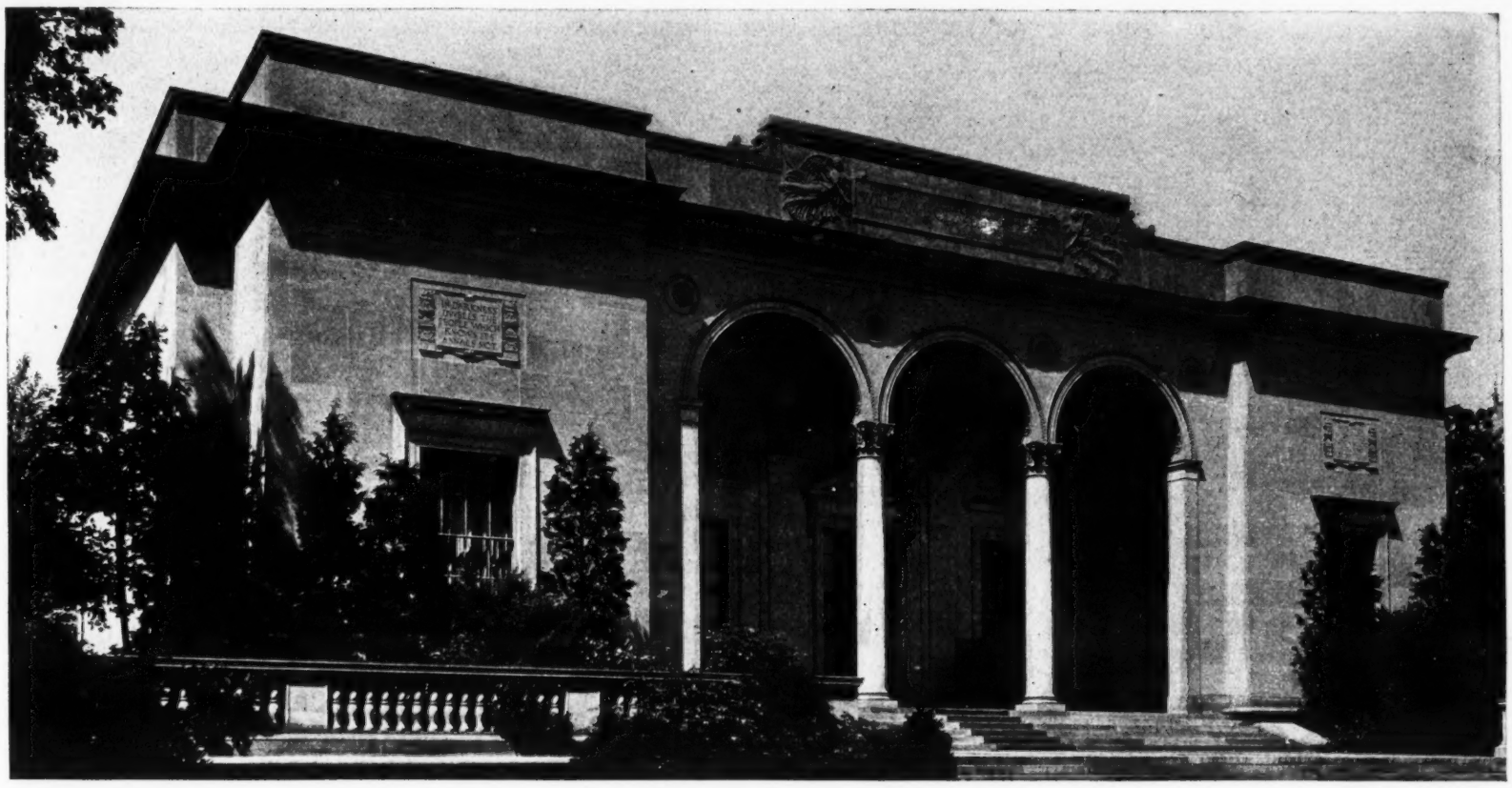
—Five years ago the board of education of Kenosha, Wis., set aside $25,000 for an open-air school. This fund has since then been augmented until it now amounts to $60,000. It is proposed to care for the crippled and otherwise physically handicapped children. The project, it is now estimated, will cost about $100,000.

—The school board and the city council of Perkasie, Pa., have decided to jointly control the playgrounds and bear the expense of operation. The board proposes to supervise the children's play.

—The school board of Green Lake, Wis., voted an appropriation for an athletic field. It proposed to encourage various outdoor sports.

—The question of providing a public playground for the children of West Paterson, N. J., is under consideration of the school board of that community.

(Concluded on Page 78)



William Clements Library, Ann Arbor, Michigan. Albert Kahn, Architect.

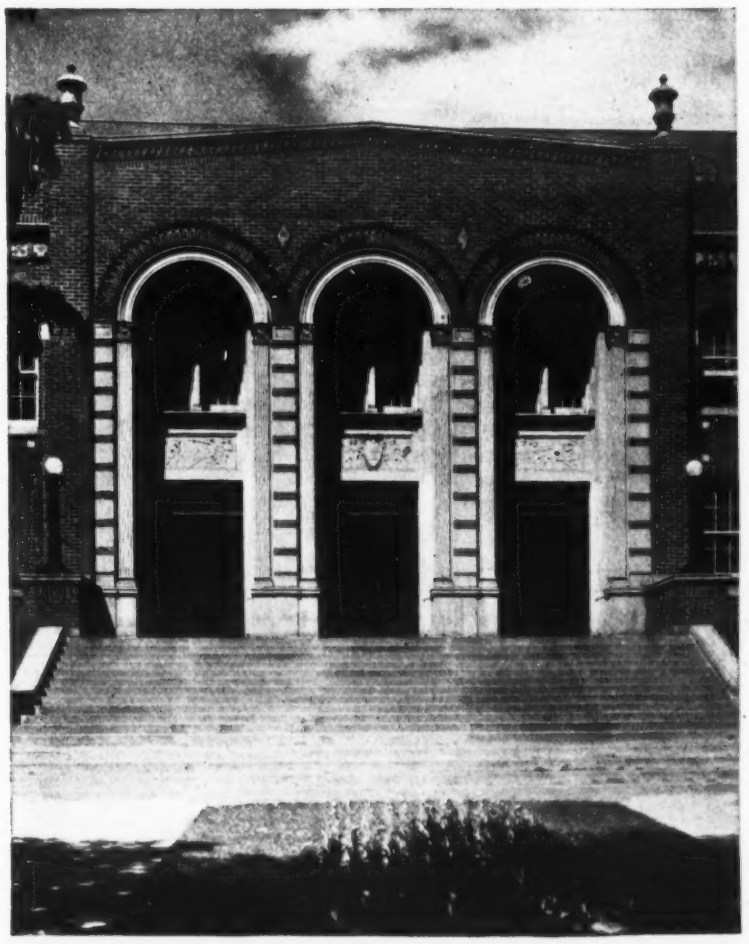
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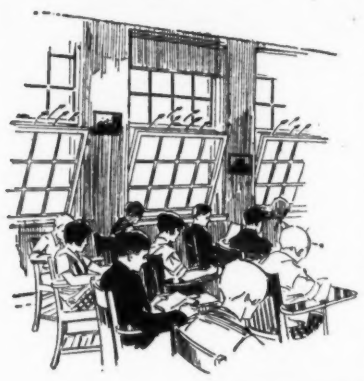
Entrance, Music Building, University of Minnesota, Minneapolis. C. H. Johnston, Architect.

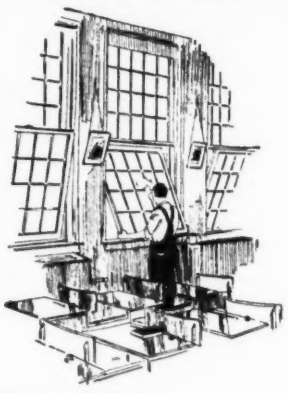
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(Concluded from Page 76)

—All children admitted to the schools of Woodbine, N. J., will have to be vaccinated as decreed by the board of education.

—Jackson, Mich. A budget calling for a 1928-29 tax rate of $10.73 on each $1,000 assessed valuation has been adopted by the board of education. The present tax rate is an increase of $1.79 over that of last year. The increase in the tax rate covers an appropriation of $14,000 for the purchase of land, $100,000 for a building fund, and $28,000 to meet maturing bonds.

—Mecklenburg, N. C. The board of education during the past year has absorbed a deficit of $91,424, has reduced the tax rate 3.5 cents, and has completed the year with a clear surplus of $31,870. The surplus was made possible by economies in operation and by money which came from unexpected sources.

—San Francisco, Calif. A budget totaling $10,491,138 has been adopted for the school year 1928-29. The program for the year provides $4,792,897 for high schools; $5,436,671 for elementary schools; and $261,568 for kindergartens. Provision has also been made for various departmental allocations for teachers' pensions and retirements, amounting to $374,000 for the year.

—Akron, Ohio. The school board has adopted a budget which draws 4.85 mills, the entire amount allowed within the 15-mill limits and 4.1 from the special 5-mill levy voted last fall for school purposes.

In order to overcome a threatened deficit in the city's operating expenses, the municipal authorities had hoped to throw part of the burden upon the board of education. The law department, however, has ruled that the school board must use its entire revenue within limitations before asking for any of the special levy. The board has accepted the law department's ruling and has taken no action toward changing the budget.

—East Cleveland, Ohio. A school budget of $1,405,000 has been adopted by the school board for the year 1929. Of this amount, $1,105,425 has been appropriated for the contingent fund, and $299,575 for the sinking fund. The budget represents an increase of $36,036 over that of 1927-28.

—Columbus, Ohio. The school board has adopted a budget of $6,295,657 for the school year 1928-29. Based on $609,000,000, which was the budget for last year, the schools will ask for 9.58 mills, which is 1.22 mills higher than a year ago. County Auditor A. J. Thatcher points out that an increase in the revenues of the city and school officials will mean an increase in the tax rate.

—Excelsior Springs, Mo. A total of $32,750 worth of school bonds were retired by the school board in July. The retired bonds included $1,250 from the Lincoln school, $7,500 from the Ilsley school, and $24,000 from the high-school bonds. The school system has a bonded indebtedness of only $25,000 at the present time.

—Ashtabula, Ohio. The city schools have adopted a budget of $410,382 for the school year 1929. The budget is $2,617 less than that asked in the budget of a year ago.

—Toledo, Ohio. The board of education has adopted a budget of $5,719,253, which is an increase of $356,153 over the amount allotted last year. The budget calls for $4,662,890 for operating expenses which, compared to $4,313,490 of last year, shows an increase of $349,400. The amount for debt charges for the sinking and interest funds and bond retirement is $1,056,636, an increase of $6,753 over last year.

—Ironwood, Mich. The school board has adopted a budget of $346,500, which is a decrease of $34,700 from that of last year.

—Toledo, Ohio. The voters will be asked to approve a bond issue of $5,000,000 at the next November election. If the bond issue is approved, an increase of 10 cents in the tax rate will be effective for the next 25 years. The board plans to issue $1,000,000 worth of bonds every five years.

—Omaha, Nebr. The school board has refused to consider a reduction of the school-tax levy and has asked that the present levy of 13 mills be continued for the present school year.

—The tuition bill which the town of North Providence, R. I., will have to pay for its boys and girls who attended out-of-town high schools is $31,378.50. This covers an average attendance of 234 pupils. Superintendent Lowe believes that the tuition costs will run up to $35,000 next year.

—The school authorities of Rochester, Minn., have issued a report showing that the schools cost more due to the fact that the pupils remain in school, and for longer terms, than was formerly the case. The demand for the training of the youth to meet the complexities of modern business has caused an increase in the school expenditures per capita of population from $1.85 in 1876, to $16.25 in 1926.

For the year 1927, the Minnesota average local tax rate for graded and high schools was 34.95 mills. Rochester's rate of 33.98 mills brings it a trifle below the average, and if 1.5 mills were allowed for the maintenance of the junior college, the rate in mills would be approximately 2.5 mills less than the state average. The local tax rate for Minnesota schools varies from 142.3 mills at Northome, to 11.7 mills paid at New Ulm. The average for the same class of schools in Olmstead county is 27.25 mills. In comparing the tax rates of various school districts, it becomes necessary to take into account the differences which exist in the condition of school buildings, courses offered, and special advantages provided.

—The school committee of Cranston, R. I., recently held an executive meeting to consider salaries, from which newspaper reporters were excluded. The Providence Tribune in commenting on secret school-board meetings said: "Meeting after meeting, the school board has no other observers than press representatives. It's the public's check on the school board but many things about the board are generously passed over. At times there is gossip over a teacher's personal affairs that is matronly in its aspect. The school board wants many things sub rosa."

—The board of education of Philadelphia, Pa., will continue the periodical medical examination of teachers and pupils. The recommendation made by Superintendent Broome that the reports of private physicians be received where teachers preferred such reports, was accepted.

—In commenting upon the proposal to create a department of education with a secretary in the President's cabinet, the Grand Forks, N. Dak., Herald says: "Two main objectives to the plan immediately present themselves. The first is that there has been too much Federal encroachment already on the affairs of the state and local government. This is pretty generally agreed upon, we think, by most students of public affairs. The second is the increase in expenditures, and consequently in taxation for educational purposes which would be almost certain to result from the proposed change."



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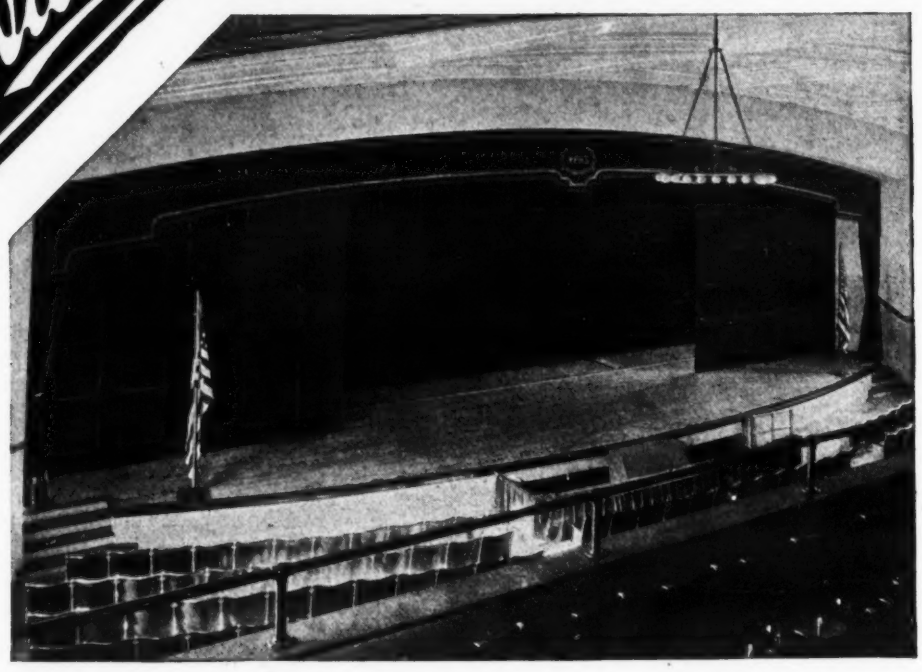
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Frequent Changes in Superintendents Tend to Lower School Efficiency

Mr. W. S. Deffenbaugh, chief of the city-schools division of the U. S. Bureau of Education, in the thirteenth of a series of articles on "City-School Problems," published in the U. S. Daily, points out that frequent changes in superintendents of schools have a tendency to lower efficiency.

In connection with his study, Mr. Deffenbaugh showed that only about 53 per cent of the cities having a population of 2,500 and over had the same superintendent of schools in 1927-28, as they had in 1922-23. In some cities, more than one change in superintendents occurred within the five-year period. Only rarely, it was found, does a superintendent remain in the same position more than fifteen or twenty years.

Frequent changes in superintendents tend to lower the efficiency of a school system, according to Mr. Deffenbaugh, since the superintendent who remains in a position but a few years cannot very well carry out a progressive program. He may get a program started, but in case of a change, the superintendent who succeeds him may not be able to take it up immediately. Before making any recommendations to the board of education, the new superintendent will find it necessary to make a careful study of conditions and to ascertain the policies of his predecessor, to see whether such policies are sound, and how they may best be carried out without making too many changes in them, all of which mean delay.

One of the factors in meeting the problem of frequent changes in superintendents, in the opinion of Mr. Deffenbaugh, is the selection of the superintendent. The selection of the right person for the position is of paramount importance, since the successful administration and supervision of any school system depends upon the superintendent. Since the efficiency of a school system depends upon the superintendent, it is evident that a superintendent cannot be selected in a day.

In seeking a new superintendent, the board of education should first decide what qualifications he should have for the particular position, and then start a search for him. He may be found in one of the assistant superintendents, or in one otherwise connected with the school system. It may be necessary to go outside for the superintendent. When this is done, extreme care should be exercised, since the qualifications of persons outside the school system are usually not so well known.

In the preparation of a list of qualifications for a city-school superintendent, a long list of qualifications might be listed by the board in search of a superintendent. Among the more important qualifications that might be mentioned, in addition to certain educational qualifications, are ability to get things done in an efficient way; ability to select the right assistant superintendents, principals, and teachers; a willingness to delegate details to subordinates and to hold them responsible for results; and ability to arouse an interest in the schools of the city.

Some questions that should be asked regarding the person being considered for a superintendency are: Is he a man of practical ideals? Has he in his present position done anything worth while? Can he do worth-while things in the face of opposition and finally win the confidence of his opponents?

Mr. Deffenbaugh concludes his study with the significant statement, "Fortunate is the board of education which has an efficient superintendent of schools and which can retain him for a number of years."

School Employment Standards

The public-school systems of the United States, especially in the medium-size and larger cities, have universally set an example to the municipalities and to the county governments for high standards and acceptable methods in selecting and managing employees. The schools generally have been uninfluenced by politics, in the bad sense of the term, and have set up merit as the chief factor in employing men and women for the nonteaching positions in the schools. The employment of teachers has been almost wholly in the hands of superintendents for so many years that hardly any factor but merit, preparation, and personal ability is controlled in the first employment or reappointment of instructors and principals.

In connection with the employment and management of men and women in nonteaching positions, the advice recently given by Mr. John N. Edy, city manager of Berkeley, Calif., is interesting for school boards and for school officials in charge of nonteaching employees. Mr. Edy's letter is in reality a guide which is expected to govern the service of municipal employees under his direction. The letter is worth reading because it embodies many points that apply with special strength to school engineers, repairmen, etc.:

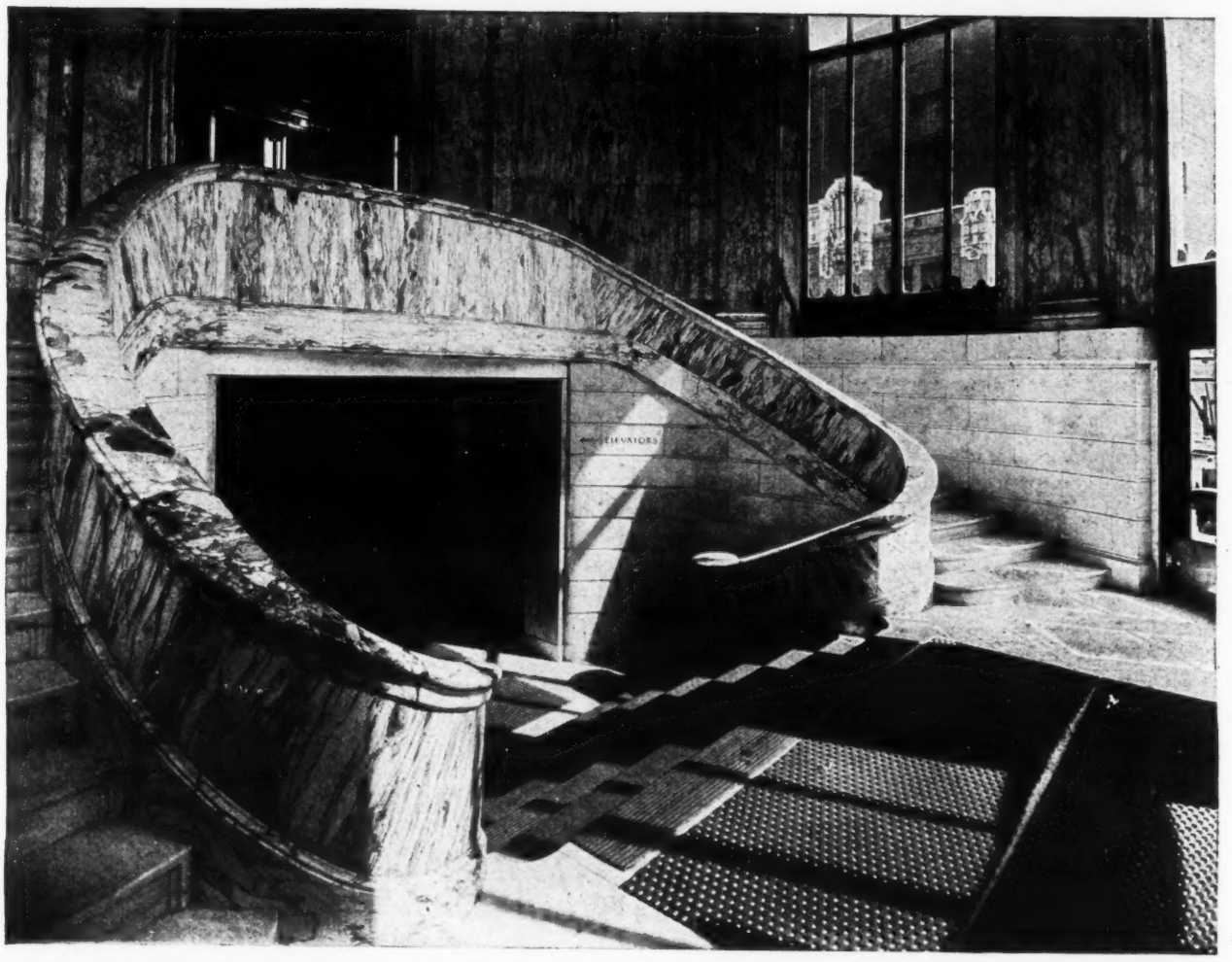
In accepting a position in the municipal service of Berkeley, you will want to know these facts:

1. The service is not conducted along "political" lines and employees are not subject to, nor may they rely upon, political influence. Persons seeking an opportunity to gratify political aspirations or to capitalize public acquaintanceship for political reasons are not eligible for employment in the administrative service. This is a measure of protection for you as well as for the public.

2. Employees may not bring with them into the service any prejudice for or against people or organizations that might affect the cordiality of their contacts with other employees or with the public. Regardless of your position in the service, it is essential that you cooperate cheerfully with all your associates and that you serve all of the public and its several groups with equal interest and loyalty.

3. Employees are not under so-called civil service, although employments and promotions are predicated upon the merit system. The plan of personal

(Concluded on Page 84)



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Even a moderate use of marble . . . an entrance-lobby floor, for instance; a low wainscot for upper corridors; or stalls in public lavatories . . . will add distinction to any building—distinction that the public is quick to sense. And such usage may be capitalized at surprisingly low cost.



There is No Substitute for Marble

Consult your nearest marble dealer for definite prices. Send, too, for the free booklet shown on the right, containing illustrations of typical marble installations with further information about the advantages of marble in many types of buildings, including residential, civic and commercial. Address Department 10-J.

NATIONAL ASSOCIATION *of* MARBLE DEALERS
ROCKEFELLER BUILDING · CLEVELAND · OHIO

The Improved Durabilt

EVER since the Durabilt Steel Locker first made its appearance in the fall of 1921 there has been an ever-increasing demand for this quality product.

Even though our plant operated both day and night for a period of several years we found ourselves unable, at times, to supply the needs of those who were anxious to obtain Durabilt Lockers.

While we have always been proud of the service rendered our customers, we have recently completed additions to our factory, which have enabled us to increase our output materially and at the same time further improve our service.

Not only have we increased our capacity and improved our service, but as a result of hundreds of tests and experiments many refinements have been added to our product which make it possible for us to truthfully say in making announcement of this new locker that—

"The Improved Durabilt Locker has no Equal!"

It has constantly been our desire to produce a locker which excelled in every respect and yet sold at such a reasonable price that it would be false economy for anyone in need of locker storage facilities to equip their buildings with any but Durabilt Steel Lockers.

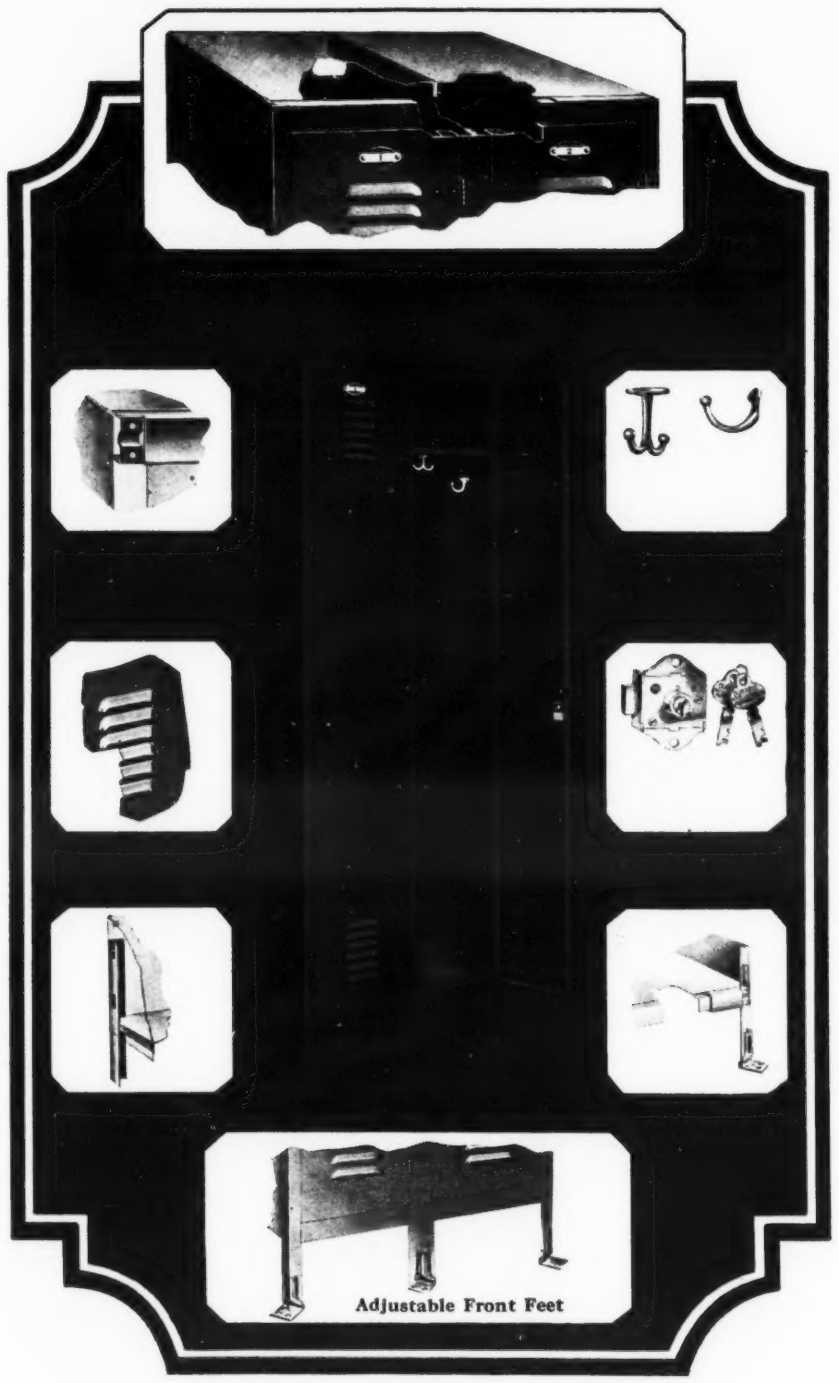
A careful study of the list of outstanding features of Durabilt as described on the adjoining page will be sufficient to convince anyone that—

Durabilt is Positively the Greatest Locker Value on the Market Today

Don't fail to see a sample of this new locker before you buy—Compare it with others and see for yourself that the Improved Durabilt Locker is in a class by itself and is all we claim for it.

Naturally it is impossible for us to adequately describe this wonderful locker in a two-page ad, so we have prepared a comprehensive folder, No. 6000, which illustrates it fully. It's yours for the asking.

DURABILT STEEL LOCKER COMPANY
400 Arnold Avenue, Aurora, Ill.
Sales Offices in all Principal Cities



"Only Durabilt Offers S

ilt Locker Has No Equal!

Outstanding Construction Features

1—**Rigid Door Frame.**—1" x 1" x ⅛" hard steel angle uprights. 1½" x ¾" No. 14 gauge formed steel channel cross members securely joined to uprights at each end by two $\frac{3}{16}$" countersunk head rivets, as riveting for this purpose is much stronger than welding. (Since *the strength of any locker is dependent on the rigidity of the door frame,* it will pay you to look into this point carefully when selecting your locker equipment.)

2—**Scientifically Reinforced Door.**—The illustrations of "Door Construction" and "Top Construction" show full-length tubular reinforcements on vertical edges of door, also hemmed flanges as used on both top and bottom of door. (No danger of bottom flange of door being bent out of shape by stepping on it.) Corners of door are securely tied together by means of arc welding.

3—**Quiet Automatic Latching Device.**—(No metal to metal contact when door is being closed.) This Patented, Tamperproof Latching Device is *Concealed* inside the vertical tubular reinforcement of door.

4—**Patented Stamped Steel** (not cast) **Straight-Lift Handle.**—With curled grip which provides ample space for comfortable hand-hold.

5—**Padlocking Attachment with Rubber Silencers.** — Arranged for use of any standard padlock; and in addition, is designed with two rubber silencers so that noise is practically eliminated when handle is raised or lowered.

6—**Reinforced, full looped** (metal formed completely around pin), **five-knuckle, Strap Hinge.**—Attached to door with two Binder Head bolts, permits door to open approximately 180 degrees. Three each on single tier and double tier standard lockers. The hinges are riveted to the door frame directly opposite the lock fingers as this gives added security. Hinge pins are embedded in angle so they cannot be driven out, neither would the removing of hinge bolts make it possible to enter the locked locker without a key.

7—**"Safety" Type Ventilating Louvres.** — (So designed as to prevent anyone injuring themselves on them.) Louvres are 4½" wide, with $\frac{3}{16}$" opening and are 1⅛" apart, center to center.

8—**Reinforcing Plate under Hinge.**—(This is a No. 14 gauge plate welded to inside of door which serves as an added protection against exceptionally rough treatment.)

9—**Improved Lock Fingers with Rubber Silencers** — which reduce noise from slamming of doors.

10—**Automatic Locking Bar Release.** — (Closing of door automatically releases locking bar permitting it to quietly drop into locked position.)

11—**Lock is attached to inside of door, without exposed bolt heads,** —which eliminates all opportunity of chiseling off bolts to gain access with malicious intent.

12—**All Coat Hooks attached with two screws**—making it impossible to twist off by hand or remove without use of tools. Udylite Rust-proof Finish.

13—**Perfect Fitting Top and End Finishing Strips**—attached by means of concealed screws. (By far the neatest and most attractive trim ever furnished for locker installations.)

14—**Attractive Brass Number Plates.** — Each locker furnished with polished brass number plate with black filled depressed numbers $\frac{7}{16}$" high. Plates securely attached with split rivets (not screws) making stealing of them very difficult.

15—**Flush Bottom.**—(Easily cleaned and built strong enough so that standing on Bottom will not injure it.)

16—**Adjustable Rear Legs.**—(Very desirable for leveling up rear of lockers when floors are uneven.)

17—**Adjustable Front Feet.**—(Permit anchoring and taking up of irregularities due to floor unevenness.)

18—**All Screws and Nuts rust-proofed by the Parker Process.**—This precaution eliminates possibility of getting rust spots on clothing.) All outside screws are of the slotless binder head type.

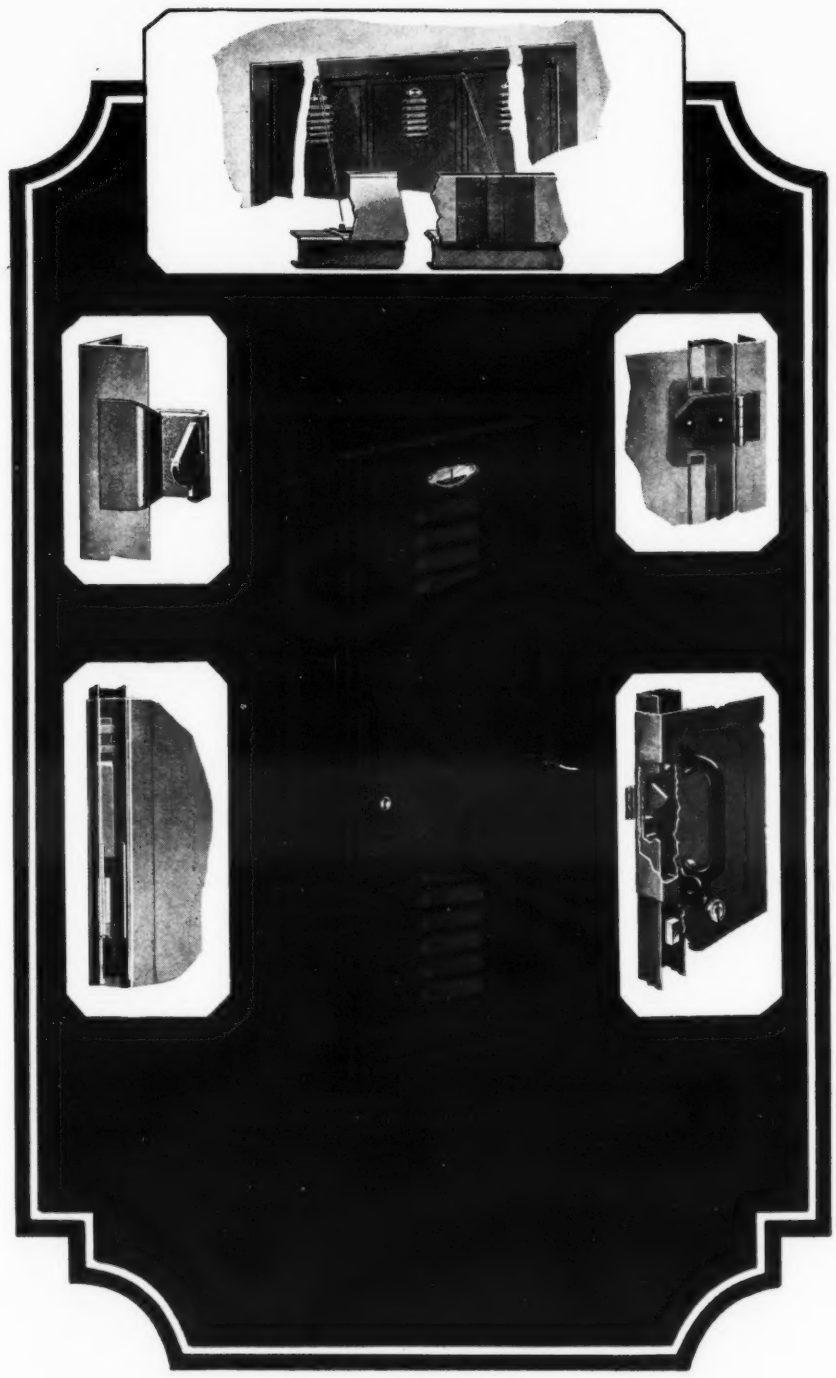
19—**Binder Head Hinge Bolts with Knurl under Head. Two to each Hinge.**—(Hold door securely and do not work loose in every-day use.)

20—**Curled Front Edge on Shelf.**—(No danger of injury by children hanging on them.)

21—**Right Hand Swinging Doors.**—Doors are hinged to swing to the Right (not left) as this is the logical way for right-handed people to open them.

22—**Attractive "Satin Texture" Enamel Finish.** — Baked on at proper temperature to insure finest appearance and durability. (Will stand rigid hammer test without flaking.) All parts thoroughly cleaned before enamel is applied.

23—**Special Equipment.**—In addition to standard equipment such special equipment as vertical partitions, coat rods, closed bases, drawers, umbrella racks, drip pans, mirrors, comb and brush trays, towel rods, golf ball trays, golf bag chains, chapeau hooks, sword clips, gun clips, etc., can be furnished to order.

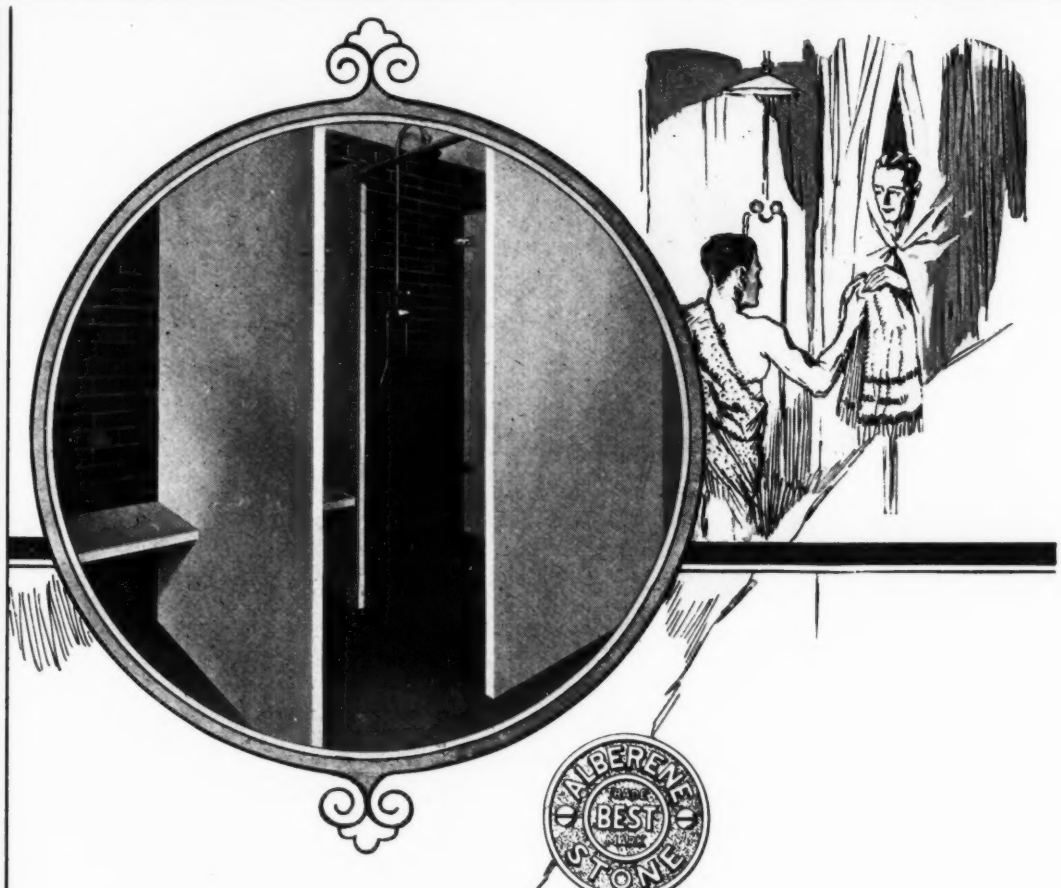


"No better built than Dumbilt!"

So Many Features of Merit!"

SHOWER STALLS

Using Alberene Stone, shower stalls can be assembled with tongue-and-groove, bolted-and-cemented, practically-invisible joints that never open up. The construction has the strength and solidity and sanitary-ness of a one-piece structure. And no metal is exposed to corrosion. ***Description, details and specifications can be had on application to Alberene Stone Company, 153 West 23rd Street, New York City.***



ALBERENE STONE

(Concluded from Page 80)

administration in effect is deemed fair to the public and to the employees, but the final responsibility of the city manager in personnel matters as provided in the charter cannot be delegated or relinquished One who feels the need of special "protection" in his position should not join the service.

4. People enter and remain in the municipal service exactly as they serve private business, that is, on the basis of the employer's (the city's) need and the employee's character, ability and willingness to give cheerful, competent service under the conditions laid down by the employer (the city). The public does not owe you nor me a place on its payroll. If your work or working conditions or associations become distasteful, it is your privilege to discuss the fact frankly with the head of your department or with the city manager. Beyond that, and failing an adjustment that satisfies you, your only recourse is to seek other employment, exactly as would be the case if you were working for a private employer.

5. The position to which you aspire and the work you will do are significant parts of the service. No matter what your duties are, have pride in them. Also, maintain your sense of proportion. Yours is but one of many positions, all of them important; your department is but one of several, all of them essential. Loyalty to your colleagues and to your particular branch of the service should but intensify your loyalty to the organization as a whole. There is but one administrative service.

6. Few persons enter the service in every respect qualified and trained for their special duties; all of us have much to learn. Upon the foundation of your past experience and training it is expected that you will build toward the objective of maximum personal accomplishment. Your future in the service depends upon the extent and success of your efforts to improve yourself and to increase your ability. You may assume that you will never be "too good" for the service; and you may aspire to any position, including department headships and city managership.

7. The department head under whom you will be employed is engaged to direct the activities of the department and to assume responsibility for its accomplishment. He is a person of character and an expert in his field. You may give him your respect and confidence and loyalty because he is big enough in experience and ability to deserve it. He will expect from you the most conscientious and acceptable effort because he can accomplish his program only with competent and industrious people. His instructions and suggestions will serve as an adequate guide in the performance of your duties. His aid and counsel and that of other department heads and the city manager are available to you in time of personal stress.

8. You will find that the service is composed of serious-minded men and women aspiring to the attainment of an ideal. This ideal is not a vague, indefinite thing, conceived solely as an object of sentimental regard or framed to trick the public into a false feeling of confidence. On the contrary, it is an intensely practical, workable, and attainable ideal, expressed briefly as follows:

> The municipal service of Berkeley shall be efficient, businesslike, helpful and courteous; and the persons employed to render this service—all of them—shall exemplify these characteristics.

The above will bear rereading; it is the goal toward which your efforts must lead.

9. The city does not expect to control your off-duty conduct, but you should remember this: the successful performance of your duties requires that you be at all times physically fit and mentally alert. This means fair treatment of your body and mind while off duty. Moreover, because you are part of the municipal government, people will attach special significance to what you say regarding it. Your conduct and your comment will always be interpreted by the public as reflecting the standards or policies of the service, or the head of your department, the city manager and the council. You can never act or speak "unofficially."

10. Prospective employees often ask what advantages or inducements are offered by the municipal service of Berkeley. As I view it, the answer is quite obvious:

First. The opportunity to do something that contributes to the totality of comfort and convenience and happiness of some eighty thousand people. That is decidedly worth while.

Second. Remuneration that represents, as nearly as we can determine it, an honest valuation of the individual service, with due regard for the law of supply and demand. That is fair to both parties.

Third. Assurance that within the limitations of appropriations and the program of municipal activities, continuance and upward progress in the service depends solely upon the employee and his abil to grasp the opportunities offered him. No ot vocation can do more.

And, finally, the privilege of working with peo who are clean and competent; people whose ide and aspirations and emotions are similar to you people you can respect and like and enjoy. A that is a rare privilege.

Life is not easy. For most of us, there is not r terial reward without hard work. The munici service is exacting; but it is an honorable serv worthy of your best efforts and your fullest fai If you doubt that, don't sign up. If you beli it,—and I believe it—you'll get a lot of joy out the new job.

NEW YORK CITY SCHOOL BOARD ALLOW 317 NEW TEACHERS FOR NEXT YEAR

In anticipation of the expansion and growth the day elementary-school system of New Y City during the year 1929, the budget committee the board of education has included in the depa mental estimate for next year, an item of $2 075 for the establishment of 317 new teaching supervising positions, making the total allowa for those schools $59,080,462.

Included in the estimates are 150 teaching p tions for increased register, 100 positions for reduction of oversize classes, that is, classes hav more than 50 pupils on register, 62 positions the 15 new school buildings to be opened dur the year, and 5 positions for special teachers.

For the expected increase in register for spring term of 1929, 22 positions were allowed, for the fall term 128 were provided. Of the p tions to be established in the spring, 17 are ass ants to principals and 5 are teacher-clerks. Of th listed for fall, 64 are teachers of 1A to 6B clas and 64 are 7A to 8B classes.

For the reduction of oversize classes, 30 teach are to be appointed for next spring and 70 in fall of 1929. In the fall, 50 teachers are to appointed to the upper grades to help bring classes down to normal size.

No new teaching positions were allowed for r school buildings to be opened during the spr term of 1929, but 62 were allowed for those to occupied during the fall term. Provision was m for the appointment to new schools of 6 princip 7 teacher-clerks, 17 7A to 8B teachers, and 32 to 6B teachers.



Roddis Flush Doors installed in Divinity School, Philadelphia, Pa. Architects Zantzinger, Borie and Medary, Philadelphia, Pa.



Four Points
of Roddis Flush Door Construction everyone buying doors should know

BUILT to the highest standards of quality, for beauty, permanence, and durability, Roddis Flush Doors offer four distinctive features of construction.

First—A core of narrow, well-seasoned softwood strips is built. These are planed smooth, fitted together and glued with waterproof glue. The solid, permanent unit thus formed provides an unchanging base for the veneers.

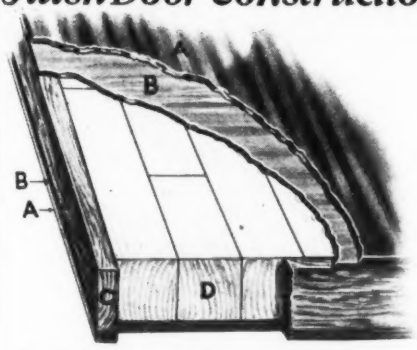
Second—Hardwood cross-banding veneer is laid over both sides of the core and glued solidly to its surfaces to seal the core faces.

Third—Hardwood strips are glued solidly to all **four** edges to protect the softwood core from moisture.

Fourth—The surface veneer of desired wood is laid over the cross-banding and glued. Then the door is subjected to tons of pressure in a gigantic hydraulic press. As a result, Roddis Flush Doors are always true and of even surface.

Roddis Flush Door construction is recognized by leading architects as standard. Specifying correctly-built flush doors thus actually means specifying Roddis. Full details and literature sent on request.

RODDIS
Flush Door Construction



A—Surface veneer of desired wood.
B—Hardwood cross-banding veneer sealing core faces.
C—¾-in. hardwood strip on all *four* edges.
D—Core of narrow white pine strips glued solid to provide base for veneers.

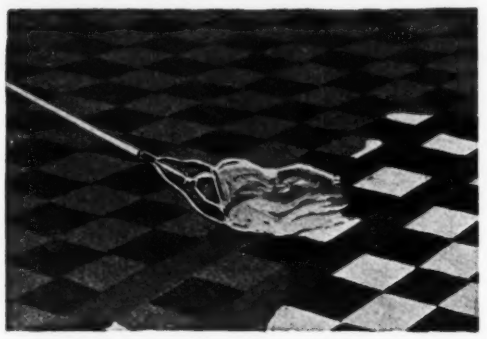
RODDIS DOORS

RODDIS LUMBER AND VENEER CO.

125 Fourth St. **Marshfield, Wis.**

Manufacturers of Flush, French, Panel and Custom Built Doors, as well as a complete line of Quality Plywood Products.

Distributors in all principal cities.



SHINE-ALL
Trade Mark
Reg. U. S. Pat. Off.

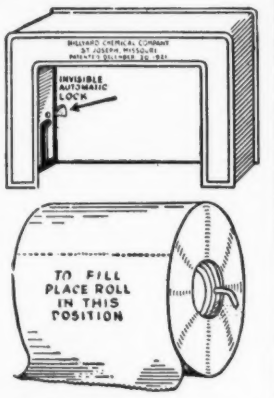
A neutral liquid chemical cleaner which contains no harmful agents such as alkali, acid, ammonia, lye and caustic.

PINE-O-CIDE
Trade Mark Reg.
U. S. Pat. Off.

PINE-O-CIDE, an antiseptic which reduces the spread of communicable diseases to a minimum and insures sanitary conditions.

Pat. No. 1648810

ECONOMY TOILET PAPER CABINET



Economy Toilet Paper and Paper Towel Cabinets are made to receive a round roll and are so manufactured as to release one sheet at a time. A substantial amount may be saved from the paper bill by the use of these Cabinets.

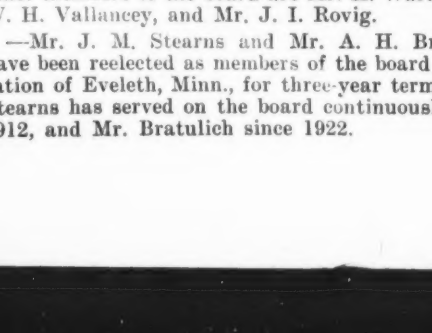
SHINE-ALL cleans, polishes and preserves in one operation all types of floors, walls, woodwork and desks. SHINE-ALL is the one cleaner for every surface.

HILLYARD'S ALL AROUND SERVICE

TRACKLESS FLOOR DRESSING

The Automatic Dustless Floor Brush pictured below is furnished free of charge to users of TRACKLESS FLOOR DRESSING and replaces the expensive Bristle Brushes.

Pat. No. 1648809



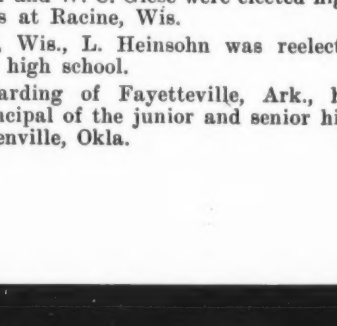
COPYRIGHT 1928

TRACKLESS FLOOR DRESSING is a scientifically prepared Wood Floor product which reduces the expense of floor maintenance and produces lighter and cleaner floors.

EMULSIFIED COCOANUT LIQUID SOAP

A pure liquid soap of very heavy anhydrous base. Manufactured from pure China Cochin Cocoanut oil.

The individual service of the Victor Liquid Soap Dispenser promotes hygiene. This Dispenser is made of heavily nickeled brass parts, no springs to get out of adjustment, and avoids waste by drippage or over use.



Pat. No. 1648811

HILLYARD CHEMICAL COMPANY
ST. JOSEPH, MO.

PERSONAL NEWS OF SCHOOL OFFICIALS

—Mr. G. N. Sleight has been reelected as secretary of the school board at Ironwood, Mich.

—Mr. R. F. Lamb has been reelected as a member of the board of education at Slayton, Minn. Mr. Lamb has been a member of the board for 23 consecutive years.

—Mr. H. H. Smith of New Richmond, Wis., is serving his eleventh consecutive three-year term as a member of the school board.

—Mr. L. B. Smith has been elected as president of the board of education at Pipestone, Minn. Mrs. Luella McGillivray was named as secretary, and Mr. G. F. Snyder as treasurer.

—Mr. William Rowe has been elected as president of the school board of Dist. No. 27 at Hibbing, Minn. Two new members, Rev. Harold Farseth and George Martinson, were seated at the annual election of officers. Mr. Max Grey was reelected as clerk of the board, and Dr. F. W. Bullen was named as treasurer.

—Mr. F. G. Hill has been reelected as president, Mr. W. B. Meland as secretary, and Mr. O. S. Westberg as treasurer of the school board at Moorhead, Minn. Mr. N. N. Melvey was elected as a new member, and Mr. S. O. Westberg, was reelected to succeed himself.

—The salaries of the school-board members of Middletown, Ind., was increased by the town board from $40 to $100 a year.

—Mr. E. A. Ripley has been reelected president of the board of education of Mandan, N. Dak., and Mrs. B. S. Nickerson was elected vice-president. The other members of the board are Mr. H. Warren, Mr. W. H. Vallancey, and Mr. J. I. Rovig.

—Mr. J. M. Stearns and Mr. A. H. Bratulich have been reelected as members of the board of education of Eveleth, Minn., for three-year terms. Mr. Stearns has served on the board continuously since 1912, and Mr. Bratulich since 1922.

—Mr. Walter Johnson has been elected a member of the board of education at Minneapolis, Minn., to succeed Mrs. T. E. Kinney.

—Mr. Frank S. Weber has been elected clerk of the board of education at Watertown, Wis. Mr. Weber succeeds Mrs. Bertha Field.

—Mr. Ambrose Langan has been reelected as secretary of the board of education at Pittston, Pa.

—Mr. George A. Knoblock has been elected as president of the board of education of South Bend, Ind., to succeed Mr. S. B. Pettengill.

—Mr. B. F. Geyer has been appointed president of the school board of Fort Wayne, Ind., to serve a term of four years.

—Mr. Herman Bernhagen has been elected clerk of the school board at Manchester, Wis.

—Mr. Frank G. Tickner, a member of the school board at Racine, Wis., died on July 16, at Erie, Pa., following a long illness.

—Dr. Otto L. Schmidt resigned as a member of the Chicago board of education on July 31. Dr. Schmidt pointed out that school business requires close attention by members of the board and he felt that regard for his own health prevented his continuing to perform the arduous duties imposed upon a member of the board. He was appointed by former Mayor Dever, and his term would have expired in 1931.

—Mr. H. S. Simmons and Mr. G. H. Goodwin of Marshall, Minn., have been reelected as members of the board of education for three-year terms.

—Mr. Ernest Alexander has resigned as president of the school board of Houston, Tex., in order to give time to his private business.

—Mr. L. E. Eckerson has been appointed secretary of the school board of Fonda, Iowa, to succeed L. A. Wood. Mr. G. F. Wilde has been appointed as treasurer, to succeed Mr. Eckerson.

—Mr. J. F. Gould has been elected president of the board of education at Minneapolis, Minn., to succeed J. E. Meyers. Mrs. H. D. Kilgore has been reelected as secretary of the board.

—Miss Ruth E. Pursley has been reelected as clerk of the board of education at Lock Haven, Pa.

—Dr. Abraham Leenhouts has been reelected as president of the school board of Holland, Mich., and Henry Geerlings as secretary of the board.

—Mr. James Baldwin has been reelected as president of the board of education of Bad Axe, Mich., for a sixteenth consecutive term. Mr. Baldwin has been on the school board for 38 years.

—S. E. Nelson has been elected president of the Heppner, Oreg., school board. Dr. A. D. McMurdo was elected director and Mrs. Claude Cox, clerk.

—Mr. G. E. Carson and Mrs. Ina Moody have been reelected as members of the board of education of Bemidji, Minn.

—Gustav Schroeder is the new member on the union board of education of Elizabeth, N. J.

—The school board of Ottumwa, Iowa, has created a new position known as that of superintendent of buildings and overseer of custodians. W. H. Stocker has been appointed to the position. President Lester Jay believes that the action will result in a saving to the school system.

—C. A. Danford, secretary of the board of education of Wheeling, W. Va., has been appointed business manager for that body. He will be under the direction of Supt. F. L. Teal.

—Daniel Gibbon, clerk of the Willow Park School, Mifflin, Wis., has served 37 years as a school official. Ralph Hodgson of Arena, Wis., has served as clerk, treasurer or director for 47 consecutive years.

—Miss Lillian Troup was reelected secretary of the Concordia, Kansas, school board.

—Fred E. Van Alstyne and M. W. Lacy were reelected members of the Wyandotte, Mich., school board.

Mrs. J. B. Dean, newly elected member of the Parma, Mich., board of education was elected president. Frank Richardson was elected secretary and Warren Rogers, treasurer.

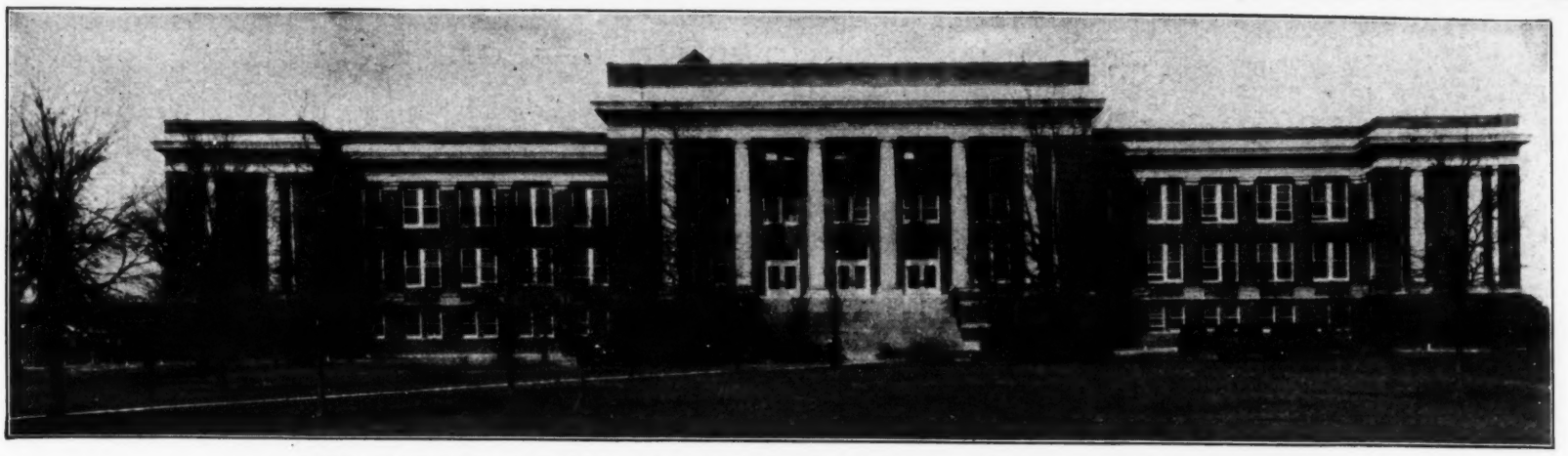
—George W. Duncan was not reelected business manager for the Santa Ana, Calif., school board. Dr. John Boll, chairman, announced that the dropping of Duncan was in line with the board's economy program.

—The Tennessee High-School Association elected the following officers: President, O. P. Pitts, Fayetteville; secretary E. R. Gabler, Knoxville; treasurer, J. O. Mitchell, Murfreesboro; vice-presidents, Joseph Jennings, Knoxville, R. L. Harris, Columbia, J. B. Calhoun, Brownsville.

—D. W. Miller and W. C. Giese were elected high-school principals at Racine, Wis.

—At Roberts, Wis., L. Heinsohn was reelected principal of the high school.

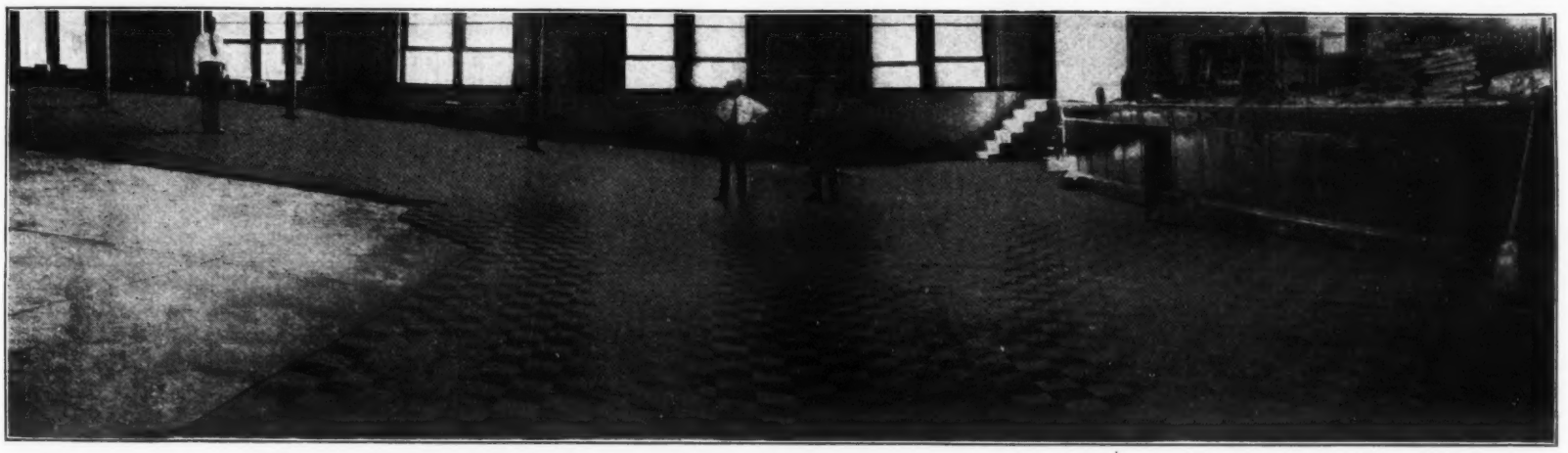
—William Harding of Fayetteville, Ark., has been elected principal of the junior and senior high schools at Holdenville, Okla.



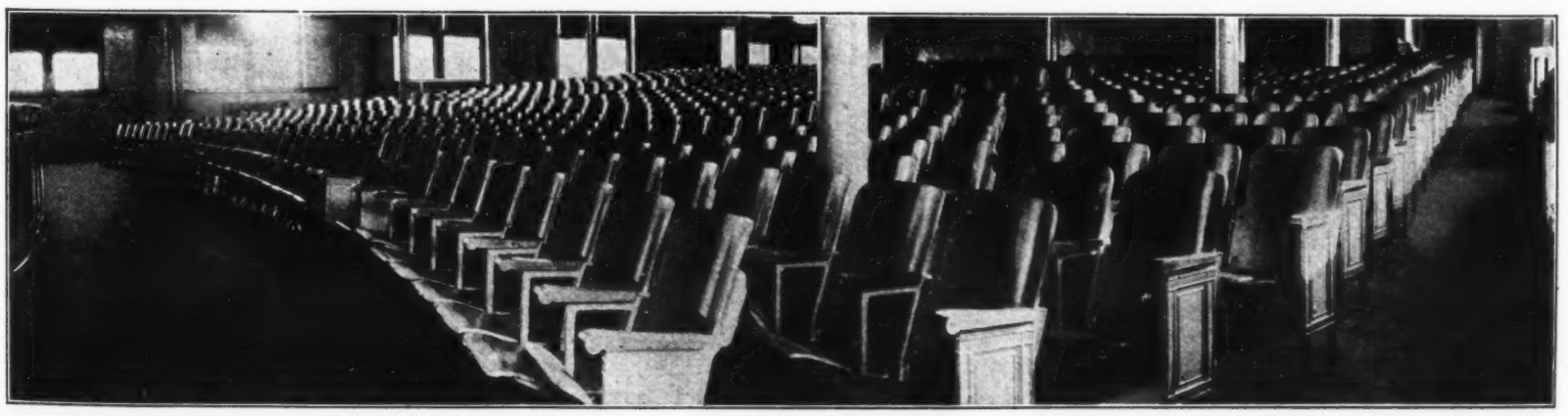
*Bruce *CELLized Oak Floor Blocks are laid in the West Tennessee State Teachers College, Normal, Tennessee*

Low cost floors for schools—more durable—quiet

Oak Blocks **(*CELLized) cost much less, laid and finished, than the more usual strip flooring. They are laid in Bruce "Everbond" directly over cement, without nails, saving the material and labor cost of screeds, floor fasteners, cinder fill, and subfloor. "Everbond" is a non-setting compound which thoroughly laminates the floor with the concrete. The use of these oak blocks also saves at least 2½ inches in height per story, with resultant economy in structural cost. This total combined saving often exceeds the entire cost of the block floor.**



Each block is a complete unit, three or more oak strips, splined together. Three sizes—6¾", 9", and 11¼" squares. Each block is *CELLized, a marvelous chemical process developed in the Bruce laboratories, which prevents shrinking or swelling, and increases durability. As a result, the floor will remain firm and level, and as "Everbond" is sound-deadening, is more quiet than any other permanent floor covering. Low cost, lowest maintenance, together with distinctive beauty, are now possible in school floors for rooms of any area.



The holding power of "Everbond" is such that ¾-in. screws, entering the wood only, secure the seats firmly. In remodeling, over old worn floors, Bruce *CELLized oak flooring blocks are laid in "Everbond," without nails.

Bruce CELLized* Oak Floor Blocks

Designed in units ~ laid without nails



Back of block, showing holding-spline

*The *CELLized oak block floor is insect proof; moisture proof. Easier to lay, scrape and sand. Will not change in size, and takes a more beautiful and lasting finish. For full technical information, write*

E. L. Bruce Co.

MEMPHIS, TENNESSEE

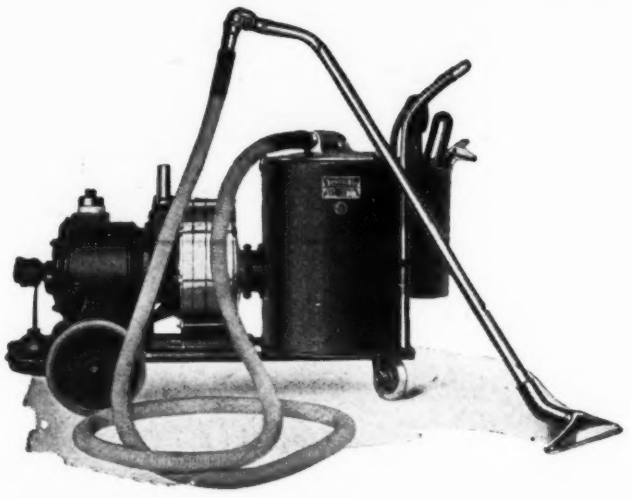
Largest manufacturers of oak flooring in the world

"CLEANLINESS KNOWS NO SEASON"

Save 40% and have cleaner, more healthful schools

"INVINCIBLE" Portable Vacuum Cleaners meet every school requirement. They have tremendous cleaning power, are easily handled, and are sturdily constructed to give a life time of satisfactory service.

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PERSONAL NEWS OF SCHOOL SUPERINTENDENTS

—John Weiland, superintendent of schools at Bradley, Ill., was chosen superintendent at Calumet, Ill. He succeeds Charles J. Sawyer. The salary is fixed at $3,500.

—William M. Gibson of Estherville, Iowa, was elected principal for the high school at Scottsbluff, Nebr. Salary $3,000.

—Peter W. Daniels of Gilberton, Pa., was elected principal of the Blythe, Pa., township schools succeeding Harry Stewart.

—William G. Davis has been chosen principal of the new million-dollar high school at Hazleton, Pa.

—At a town meeting held at Saugus, Mass., and by a unanimous vote of 400 citizens, the local school committee was asked not to accept the resignation of Supt. Jesse W. Lambert.

—The school board of Danville, Ark., elected D. F. Webb as superintendent.

—Miss Evelyn Purcell who assumes the superintendency of the Wayne county, Ga., schools in September, succeeds her father to the office. She is 21 years of age and the youngest school superintendent in the state. Her father, B. D. Purcell, accepts the principalship of a school at East Point, Ga.

—Stephen O. Salmon has been chosen principal of Union-Endicott High School at Endicott, N. Y. Salary $3,200.

—C. B. Baymiller is the new principal of the Averyville, Ill., high school. Salary $3,500.

—Lee J. McEwan of Hornell, N. Y., has been appointed principal of the Central High School at Binghamton, N. Y., to succeed John F. Hummer.

—Floyd B. Wehmeyer of Malta Bend, Mo., was elected superintendent at Hunnewell, Mo.

—John W. Spangler, for seven years principal of the high school at Lorain, Ohio, was elected principal of Kent Roosevelt High School, Ravenna, Ohio. He succeeds A. L. Walker, who becomes superintendent of the Hudson, Ohio, schools. Spangler's salary will be $2,950.

—George E. Lord, principal of the high school at Norway, Me., has been chosen principal of the Stephens High School at Rumford, Me.

—H. H. Hill, formerly superintendent of schools at Walnut Ridge, Ark., has been appointed supervisor of secondary education for the state of Arkansas. Mr. Hill succeeds M. R. Owens.

—George M. Watson has been appointed superintendent of the Marengo county, Ala., schools. He succeeds M. H. Killingsworth, who becomes principal of the Cullum County High School.

—Hershel S. Morgan has been named principal of the University High School at Vermillion, S. Dak.

—R. W. Bardwell of Rock Island, Ill., assumes the school superintendency of Madison, Wis. R. W. Bardwell is the son of C. M. Bardwell, a well-known Illinois educator.

—The school board of Hot Springs, Ark., chose as its superintendent of schools Harvey H. Haley of Blytheville, Ark.

—Kenneth Van Buskirk has been chosen principal of the Willow Street School at Plymouth, Pa.

—Lancelot Gordon has been chosen principal of the Lakewood school near Madison, Wis.

—W. R. Applewhite is the new superintendent of the New Albany, Miss., schools.

—Richard A. Jensen was appointed principal of the Shenevus, N. Y., high school.

—Henry A. Pace, formerly superintendent of the Emery county, Utah, school, has been appointed superintendent of the North Summit High School at Coalville, Utah.

—Supt. R. B. Irons of Winona, Minn., has been given an increase of $500 in salary, making his present salary $5,500.

—Mr. Alfred Tallfon of Ashby, Minn., superintendent of schools of Cook county, was drowned in the Rogue river, near Prospect, Ore., on July 14.

—Supt. C. E. Chrane of Boonville, Mo., has entered upon his seventh consecutive year as head of the city schools.

Mr. William W. Haggard has been appointed superintendent of the Joliet Township High School, Joliet, Ill., at a salary of $8,000 per annum. Mr. Haggard was formerly principal of the high school at Rockford.

—Mr. Eugene B. Butler, formerly head of the department of elementary- and high-school inspection of the Indiana State Education Department, has recently been appointed director of statistics, reference, and research. Mr. Butler has entered upon his new duties at once.

—Supt. J. B. McManus of LaSalle, Ill., has been reelected for another year, with a substantial increase in salary.

—Mr. William J. Bogan, newly appointed superintendent of schools at Chicago, Ill., was the guest of honor recently, when 85 teachers of the Lane Technical High School, of which he was formerly principal, feted him at the Ambassador Hotel. Introduced by Mr. Grant Beebe, his successor at the Lane School, Mr. Bogan predicted a bright future for the Chicago schools. He pointed out that merit will hereafter be the real qualification for advancement rather than seniority. There will be a principals' examination within the next year to which all principals are invited.

—Mr. J. E. Nelson of Pine River, Minn., has been elected superintendent of schools at Renville.

—Mr. J. F. Bemiller has been elected superintendent of schools at Galion, Ohio.

—Mr. Ralph B. Baker has been elected superintendent of schools at Farmington, Mich.

—Mr. Carl B. Moore has resigned as superintendent of schools at Fairbury, Ill., and will go to Urbana, where he makes his headquarters as traveling salesman for a school-supply company.

—Mr. W. E. Bufkin, formerly principal of the Enochs Junior High School at Jackson, Miss., has been appointed as assistant superintendent of schools.

—Dr. Lambert L. Jackson, formerly assistant commissioner of education for New Jersey, has accepted the position of first assistant superintendent in charge of instruction in the Newark school system.

—Mr. W. Spader Willis has retired as principal of the Newark Normal School at Newark, N. J. Mr. Willis has completed 43 years of service and retires with an annual compensation for the remainder of his life.

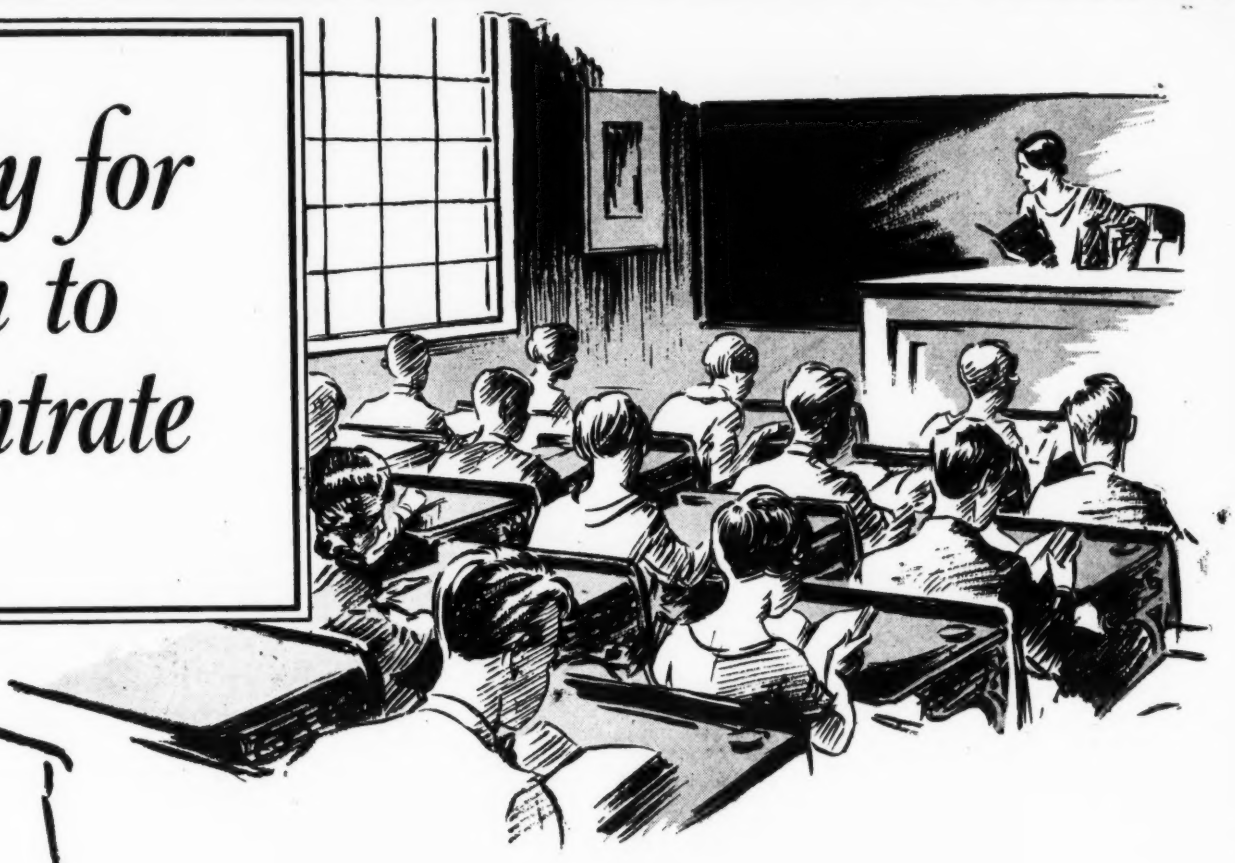
—Arthur Rowell was reappointed superintendent of the Glencoe, Ill., schools. He is serving his twenty-fifth year.

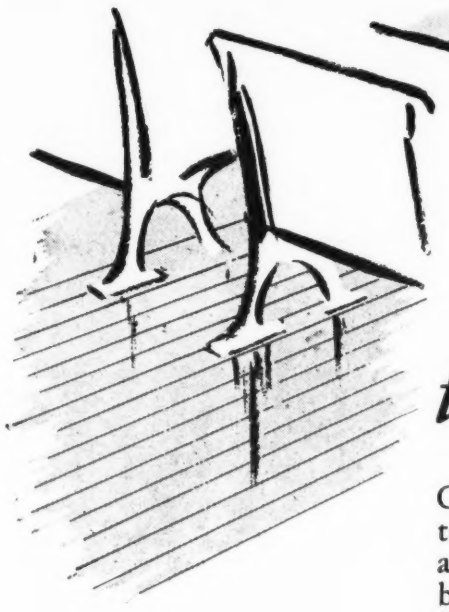
—Thomas W. Gosling, the new superintendent of the Akron, Ohio, schools, has been given a warm reception by the press and the public. One newspaper says that "a tall, spare figure, carried very erect, Dr. Gosling is a blended educator-business man in appearance. He has dark crisp hair, dark lively eyes, and a straight nose on which rest glasses that contribute largely to the scholarly air. His lips are thin and generally smiling, his chin square."

—Louis F. Hammerle was chosen superintendent of the Xenia, Ohio, schools. He was promoted from the high-school principalship.

(Concluded on Page 91)

It's easy for them to concentrate





because the floor beneath their feet is warm, dry, resilient, clean

Cold, damp, rigid floors—what a toll they take in youthful health and mental efficiency! For how can boys and girls be at their best if feet are chilled and muscles tired—if "colds" and sickness are permitted to interrupt their regular routine?

Eliminate such conditions! Floor with the one flooring material that combines warm, dry, cushioning comfort with the qualities of lasting wear which school use demands. Northern Hard Maple!

This resilient flooring material is remarkably tough-fibred and tough-grained. It will not sliver or splinter. Scuffing, youthful feet and the moving of equipment simply make it smoother with time. Northern Hard Maple actually out-wears stone!

Maple, moreover, because of its permanent smoothness, is exceptionally easy to keep clean. It offers no open lodging places for dust and germ-laden dirt to collect. And it permits quick, simple, permanent anchorage for seats.

Hundreds of schoolboards have been guided by these facts in selecting flooring. They have chosen Maple for schoolrooms, corridors, gymnasiums, assembly halls. Consult your architect about Northern Hard Maple.

Your retail lumber dealer can furnish **MFMA** Maple, Beech or Birch flooring, or he can get it for you. Members of the Maple Flooring Manufacturers Association are:

Cobbs & Mitchell, Inc.	Cadillac, Mich.
Connor, R. Company	Marshfield, Wis.
Cummer-Diggins Company	Cadillac, Mich.
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Foster-Latimer Lumber Co.	Mellen, Wis.
Holt Hardwood Company	Oconto, Wis.
Indiana Flooring Company, (Mill at Reed City, Mich.)	New York, N. Y.
Kneeland-Bigelow Company	Bay City, Mich.
Kneeland-McLurg Lumber Co.	Phillips, Wis.
Mitchell Brothers Company,	Cadillac, Mich.
Nichols & Cox Lumber Co.	Grand Rapids, Mich.
North Branch Flooring Co.	Chicago, Ill.
Northwestern Cooperage & Lumber Company	Gladstone, Mich.
Osgood & Blodgett Mfg. Co.	St. Paul, Minn.
Oval Wood Dish Corporation	Tupper Lake, N. Y.
Robbins Flooring Company	Rhinelander, Wis.
Sawyer Goodman Company	Marinette, Wis.
Soo Lumber Company	Glidden, Wis.
Stephenson, I. Co. Trustees	Wells, Mich.
Ward Brothers	Big Rapids, Mich.
Wells, J. W. Lumber Company	Menominee, Mich.

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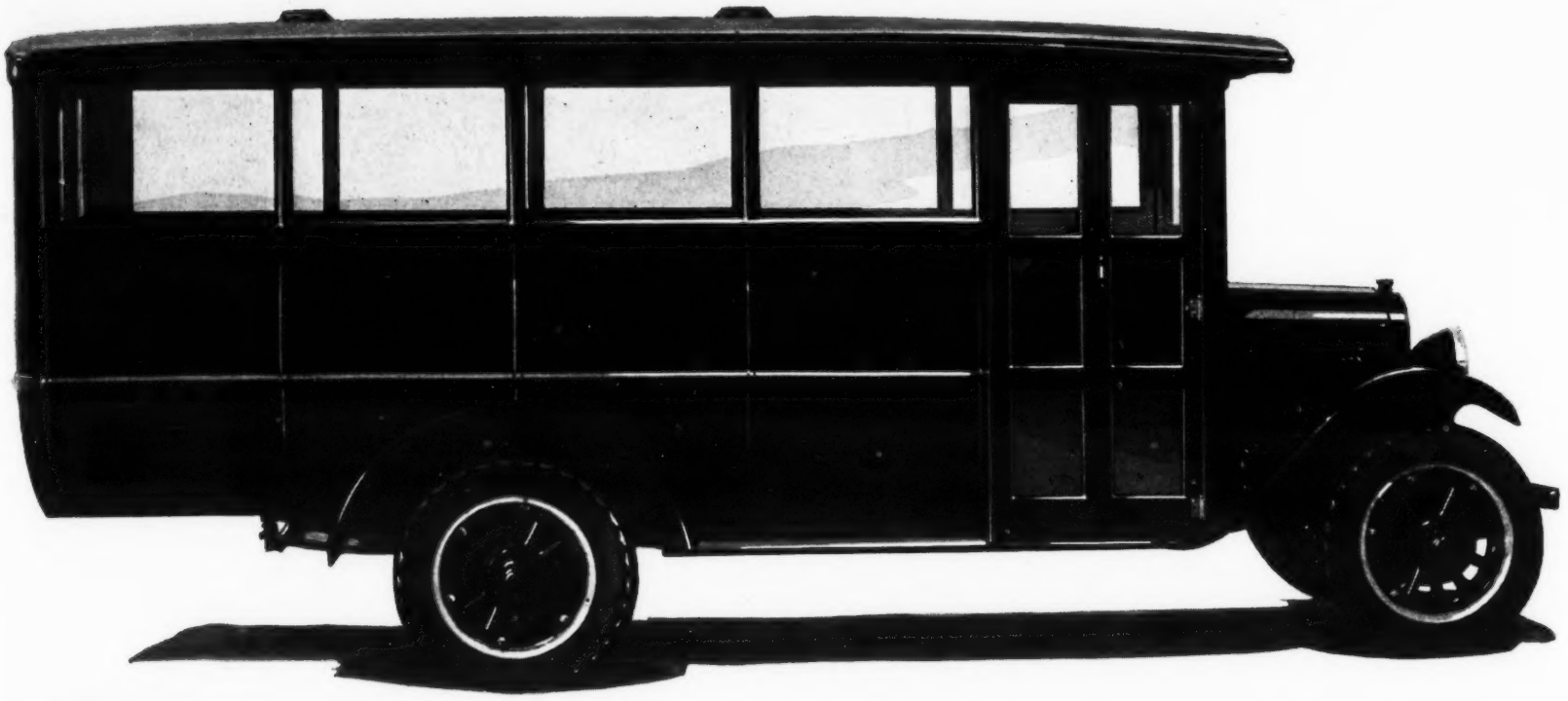
Guaranteed Floorings

The letters **MFMA** on Maple, Beech or Birch flooring signify that the flooring is standardized and guaranteed by the Maple Flooring Manufacturers Association, whose members must attain and maintain the highest standards of manufacture and adhere to manufacturing and grading rules which economically conserve these remarkable woods. This trade-mark is for your protection. Look for it on the flooring you use. **MFMA**

Floor *with* Maple

for Economical Transportation

CHEVROLET



The Lowest-Priced Truck

equipped with

4 Speeds Forward-4 Wheel Brakes

In the few weeks since the new Utility Truck was announced, it has received an enthusiastic reception from thousands of truck buyers throughout the nation—

—for it not only embodies the most recent advancements in truck engineering and construction, but it sells for the lowest price ever placed on a truck equipped with four-speed transmission and four-wheel brakes!

In addition to the scores of truck features for which Chevrolet has long been famous, there is now provided the new 4-speed transmission, with an extra low gear that gives tremendous pulling power for steep hills and heavy roads—and reduces to the very minimum the starting strain on motor, clutch and rear axle... powerful 4-wheel brakes that safely control the heaviest loads under every condition of highway... a new ball bearing steering mechanism which makes it easy to drive over rough and muddy roads.

The UTILITY TRUCK

$520

(Chassis Only)

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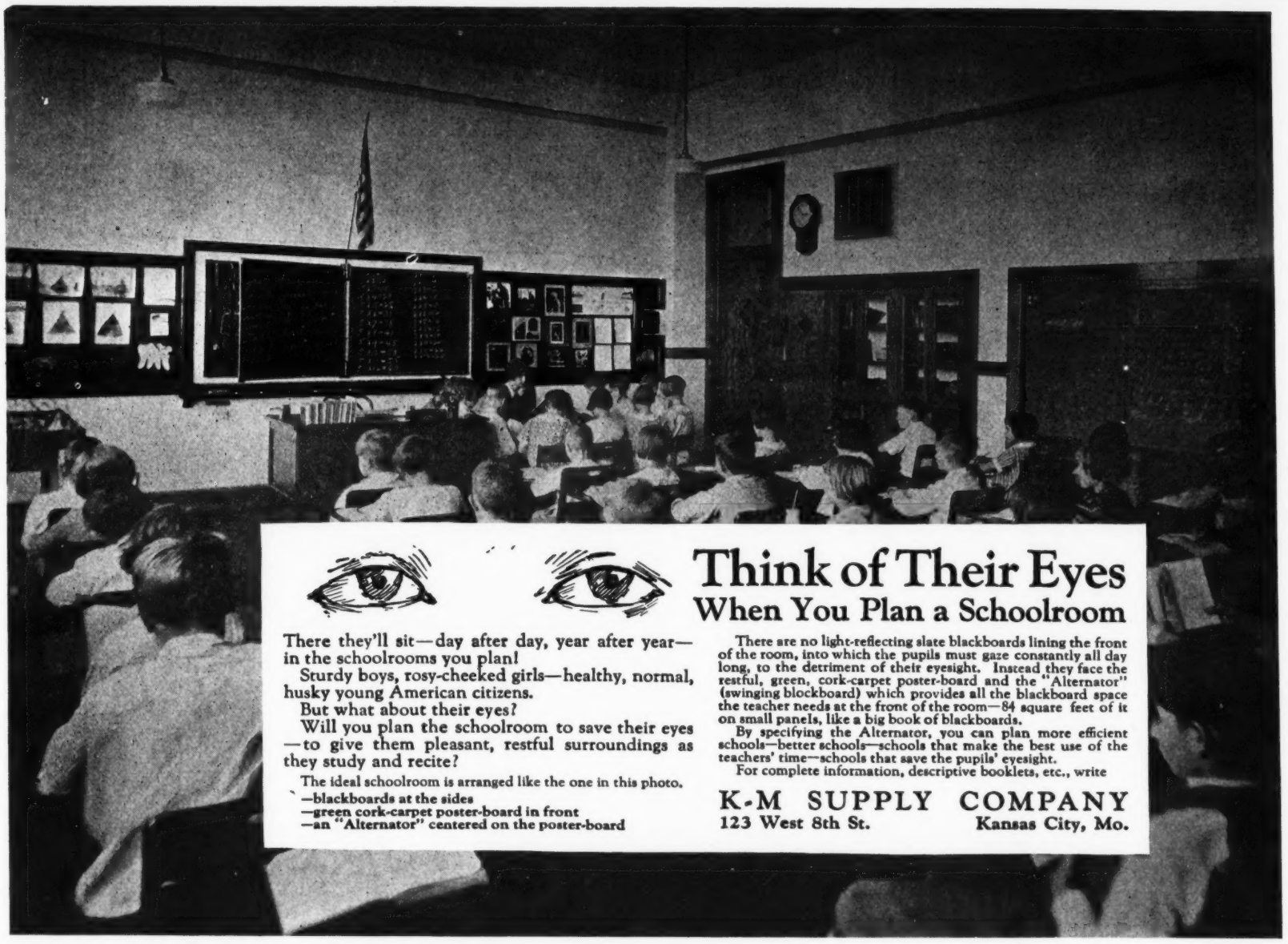
Visit your Chevrolet dealer today and see this remarkable truck. You'll find that it offers every feature needed for dependable transportation—plus amazing economy of ownership and operation.

The Light Delivery Chassis, $375, f. o. b. Flint, Michigan

CHEVROLET MOTOR COMPANY, DETROIT, MICHIGAN

Division of General Motors Corporation

WORLD'S LARGEST BUILDER OF TRUCKS



(Concluded from Page 88)

—Ralph C. Jenkins resigned the superintendency of schools of Putnam, Conn., to become principal of the Johnson Normal Training School at Johnson, Vermont.

—Supt. John C. West of Bemidji, Minn., has been reelected for his eighth consecutive term.

Mr. John Smith has entered upon his tenth year as high-school principal.

—Harris Hart, state superintendent of public instruction for Virginia since 1913, has tendered his resignation. Rumor has it that he is a candidate for the governship.

—Jesse W. Lambert will retire as superintendent from the Saugus, Mass., schools. This was agreed upon last spring with the understanding that he continue until July 15. Mr. Lambert has since changed his mind as to his resignation. The school board will take final action in the matter October 15.

—E. A. May was chosen principal of the Robinson, Ill., township high school.

—Mr. Fred Guffey of Herman, Nebr., has been elected superintendent of schools at Kenesaw.

—Mr. B. R. Jones of Iowa City, Iowa, has been elected superintendent of schools at Spencer.

—Mr. L. M. Farrin of Rockland, Mass., has been elected superintendent of schools at Putnam, Conn.

—Supt. W. W. Borden of South Bend, Ind., has begun his fourth three-year term as head of the school system. Mr. Borden will receive a salary of $8,000 for the first year, $8,500 for the second year, and $9,000 for the third year.

—Mr. M. H. Baker has been elected superintendent of schools at Bothell, Wash.

—Mr. W. E. Davidson has been elected superintendent of schools at American Falls, Idaho.

—Mr. M. S. Hamm, superintendent of schools at Marshfield, Oreg., has accepted a position in California.

—Supt. W. F. Geiger of Tacoma, Wash., has been reelected for a three-year term. Mr. Geiger will receive a salary of $6,900 the second year and $7,200 the third year.

—Mr. C. A. Smith of Afton, Wyo., has been elected superintendent of schools at Provo, Utah. Mr. Smith succeeds Claude Lewis, who resigned in April last.

—Mr. Wilmoth Clark has been elected as superintendent of the grade schools at Norton, Kans., to succeed R. A. Raymond.

—Mr. E. W. Opperman of Iowa City, Iowa, has been elected as principal of the high school at Eagle Grove.

—Mr. S. F. Maughon of Canton, Ga., has been elected superintendent of schools at Commerce.

—Mr. L. E. Johnson has been elected superintendent of schools at Deshler, Ohio, to succeed W. E. Roberts.

—C. S. Pearson will continue as superintendent of schools at Galesburg, Mich.

—Russel W. Hovey of Chapin, Ill., has been appointed principal at Oregon, Ill.

—After listening for three hours before a large crowd of citizens to charges and countercharges hurled at Supt. William F. Geiger, the school board of Tacoma, Wash., reelected him with a four-to-one vote. The charges in the main were made by former Tacoma teachers.

—C. D. Wallace was named principal for the Coffee County High School located at Enterprise, Ala.

—Simon H. Irick of Flora, Ind., has been chosen principal of the consolidated schools at Chili, Ind.

—After a number of hearings held before a large delegation of citizens, the school board of Garfield, N. J., reappointed Arthur T. Cross, supervising principal in a vote of five to two.

—George H. Lloyd of Somerville, N. J., is the new principal of schools at Woodlawn, N. J.

—Mr. L. N. Neulen of Glen Rock, N. J., has been elected superintendent of schools at Teaneck, to succeed Mr. G. M. Lee. Mr. Neulen, who will have charge of the six grade schools as well as the high school, will receive a salary of $6,000 per annum.

—Mr. N. G. Parke of Sewickley, Pa., has been elected superintendent of schools at Waynesburg, to succeed R. M. Archibald.

—Mr. Russell Gwynn of Paris, Mo., has been elected superintendent of schools at Madison.

—Supt. E. E. Cowan of Elk City, Mo., has been reelected for a third consecutive term.

—Mr. Dale Billman has been elected superintendent of schools at Sullivan, Ind., to succeed A. D. Montgomery, who has gone to Crawfordsville.

—Supt. R. G. Dean of California, Pa., has been reelected for a third consecutive term.

—Mr. F. G. Ransdell of Ridgeway, Ohio, has been elected superintendent of schools at Dunkirk.

—Mr. C. E. Martin of Bowling Green, Ky., has been elected superintendent of schools at Elizabethtown.

—Mr. Max Chambers of Ponca City, Okla., has been elected superintendent of schools at Sapulpa, to succeed J. R. Holmes.

—Mr. E. C. Duncan of Albany, Mo., has been elected superintendent of schools at Clarinda, Iowa.

—Mr. E. L. Weaver of Clarinda, Iowa, has resigned to accept the superintendency of the school system at Scottsbluff, Nebr.

—Supt. Harry Schwall of Wauseon, Ohio, has been reelected for another year.

—Supt. F. B. Booth of Irving, Kans., has been reelected for another year.

—Mr. L. W. Adams of Casselton, N. Dak., has been elected superintendent of schools at Anoka, Minn. Mr. Adams succeeds O. E. Smith.

—Mr. R. V. Shores has been elected confidential secretary to Mr. George Melcher, newly elected superintendent of schools of Kansas City, Mo. Mr. Shores was formerly vice-principal of the Westport High School.

—Mr. James J. Hagan of Beardstown, Ill., has been elected superintendent of schools at Rock Island, Ill., to succeed Mr. Bardwell.

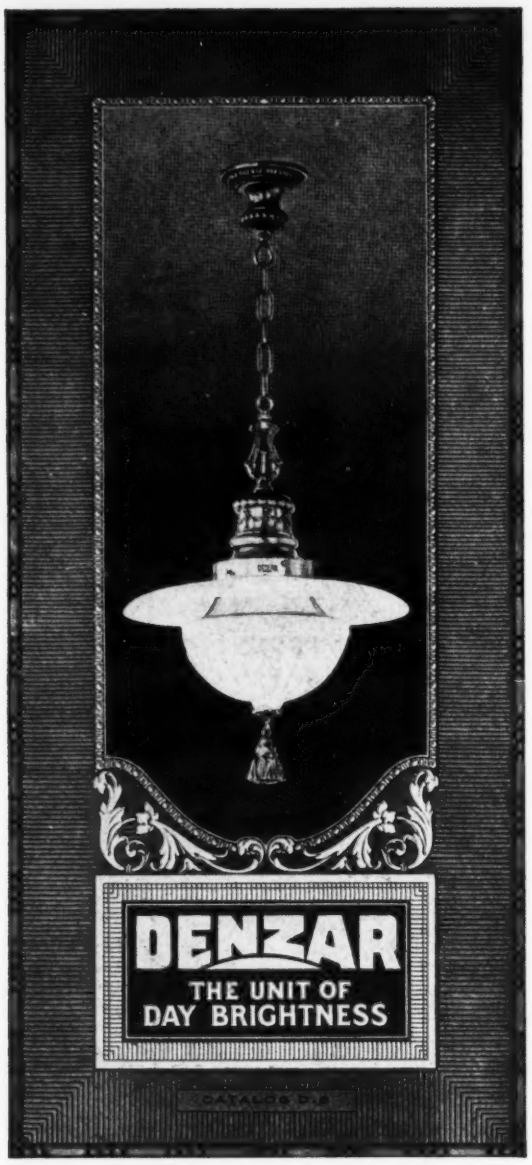
—Mr. John F. West of Pasadena, Calif., has been elected superintendent of schools at Albany, to succeed Melrowe Martin.

—Mr. J. A. Van Natta has been elected superintendent of schools at Sturgeon Bay, Wis.

—Supt. R. J. Fuller of Lancaster, N. H., has been unanimously reelected for the ensuing school year.

—Mr. W. E. Olds, formerly superintendent of schools at Escanaba, Mich., died suddenly at Detroit, following an attack of heart failure. Mr. Olds has been a member of the Michigan Teachers' College faculty for the past three years.

—The board of education of Duluth, Minn., will shortly appoint another assistant superintendent of schools. The new official will have charge of the supervision of primary schools.



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SCHOOL FINANCE AND TAXATION

ADVANCES MADE IN EDUCATION IN TWENTY-FIVE-YEAR PERIOD

Tremendous increases in expenditures for school buildings throughout the United States are disclosed in a survey conducted by the U. S. Bureau of Education. Coincident with this, the Bureau reported that there had been a rapid increase in the number of high-school pupils during the period from 1900 to 1925.

The survey shows that expenditures for sites, buildings, furniture, libraries, and apparatus of elementary and secondary schools combined, increased from $35,450,820 in 1900 to $433,584,559 in 1925. The number of pupils enrolled in public high schools jumped from 519,251 in 1900 to 3,650,903 in 1925.

The survey also reveals that school property increased in value 637.05 per cent in the past 25 years.—(from *United States Daily.*)

TAXING RAILROADS TO SUPPORT SCHOOLS

In New Jersey, the so-called railroad tax is important because it has become a vital factor in the support of the schools. Previous to 1906, the main stem railroads and canal properties were assessed by local districts and taxes collected by them. This led to inequalities and confusion.

The railroads were anxious to have the state make the assessments and collect the taxes. Finally the local districts agreed to the state assessing and collecting the taxes provided that the moneys should be returned to them for school purposes. The legislature thereupon passed an act substantially complying with the plan.

Quoting from a state document: "The increase in our school revenues in connection with a measure authorizing an appropriation of $400 to any district in the state for each teacher employed exclusively in a four-year high school, $300 for each teacher employed exclusively in a three-year high school, and $25 for each pupil sent out of a district for academic instruction, together with the very liberal apportionment that county superintendents will be enabled to make on the basis of attendance, furnishes the assistance needed by school districts in the more sparsely settled portions of the state to enable them to provide their youth with school facilities which are in accordance with the meaning of the law 'adequate and suitable.' What has long been a legal, moral, and human obligation, has through the well-nigh inspired enactment of the 1906 legislature, become not only a feasible proposition, but a grand opportunity of which we should make the most."

The following table shows the railroad tax yield for twenty odd years:

State Railroad Money for School Purposes

School Year	*Ratable Valuations*	*Average Tax Rate*	*Total Railroad Tax*
1907-08	$194,532,469	$1.801	$3,503,529
1908-09	200,045,173	1.627	3,254,734
1909-10	201,924,499	1.681	3,394,350
1910-11	206,034,465	1.808	3,725,103
1911-12	209,370,995	1.856	3,885,925
1912-13	228,587,045	1.896	4,334,010
1913-14	229,867,421	1.961	4,507,700
1914-15	229,565,147	1,979	4,543,096
1915-16	230,373,202	2.024	4,662,753
1916-17	236,969,261	2.115	5,011,899
1917-18	240,738,350	2.193	5,279,392
1918-19	244,863,605	2.340	5,729,808
1919-20	246,621,381	2.377	5,862,190
1920-21	246,621,381	2.853	7,036,107
1921-22	250,806,026	2.853	7,155,495
1922-23	253,760,650	3.440	8,729,366
1923-24	254,070,754	3.561	9,047,459
1924-25	256,728,513	3.561	9,142,102
1925-26	258,524,801	3.671	9,490,445
1926-27	262,170,881	3,728	9,773,730
1927-28	265,369,864	3.615	9,593,120

The fund derived from railroad taxation has been subjected to deductions for good roads, soldiers' bonus, and state institutions. Thus for the year 1927-28 the school received $6,393,837 out of a total of $8,276,758.

SEVERANCE TAX AND SCHOOL SUPPORT

The revenues from the severance tax adopted by the legistlature of Louisiana will, according to an estimate made by T. H. Harris, state superintendent of public instruction, yield from $1,500,000 to $2,000,000 a year.

"A severance tax measure, based on quantity production, was passed and the proceeds dedicated to the purchase of textbooks and to the current school fund," Superintendent Harris declared, "and it is reasonable to expect that the revenues from this source will be from $1,500,000 to $2,000,000 a year.

"A tax of one-half cent a pound was placed on carbon black," continued the superintendent, "and the proceeds were allocated to the public schools. The revenues from this source should be from $500,000 to $750,000 a year. We may expect to receive, I think, from the two sources, namely, the severance tax and the carbon black bill, from $2,000,000 to $2,750,000 a year.

"The appropriation bill carries $750,000 a year for the purchase of free textbooks. Assuming that all of this will be spent, we should have left to go into the current school fund $1,250,000 a year, if we take the minimum estimate above, or $2,000,000 if we take the maximum estimate. This would give us approximately $8 per child from state sources, and I believe that you should budget no more than that. Should more be received, you would probably be able to find a way to use it, and it would come in as a pleasant surprise."

Superintendent Harris also announces that the tobacco tax has been repealed and there will be no more revenues from that source.

IMPORTANT SCHOOL-BOND SALES
During the Month of July, 1928

Alabama—Baldwin Co., School	$ 250,000
California—Los Angeles Co., City High-School District	300,000
California—San Diego Co., San Diego School and High-School Districts	1,836,000
California—San Diego Co., San Diego School and High-School Districts	477,000
Indiana—East Chicago, School District	250,000
Michigan—Fordson, School District	280,000
Michigan—Grosse Pointe Twp., Rural Agricultural School District No. 1	250,000
Missouri—Belleview, School District	275,000
New Jersey—Glen Ridge, School District	333,000
New Jersey—Union Twp., School District	290,000
New York—School Construction	7,900,000
New York — Greenburgh, Union Free School District No. 9	390,000
Ohio—Cleveland, City School District	1,500,000
Virginia—Richmond, School	400,000
West Virginia—Brooke Co., Cross Creek School District	275,000

FINANCE AND TAXATION

—The board of education of Elgin, Ill., has adopted a 1928-29 budget calling for a tax levy of $495,000, which is $20,000 more than was exacted last year. Superintendent R. W. Fairchild reported a balance of $14,629.

(Continued on Page 94)



The stairways shown in this illustration are protected by Wooster Safe-Groove Stair Treads and have been in use for years without replacement.



Stairways Made Safe
for impetuous little feet

SCHOOL BUILDINGS are not exempt from the yearly toll of serious accidents on stairways. Little feet that race up and down, need more than any others, the protection of Safety Stair Treads.

Wooster Safe-Groove Treads offer a sure friction surface, increasingly effective as the tread is worn. There is just enough "bite" to the carborundum filled channels to check impetuous little feet, and to make their owners, for the moment, foot conscious and careful.

These Safety Treads effectively prevent slipping on the stairways of any material—even when snow or mud is tracked in from outside. The foot can't slip on the carborundum ribs and the deep longitudinal grooves catch and hold out of harm's way, pencil stubs, rubber bands or other litter which might cause slipping.

In hundreds of school buildings Wooster Safe-Groove Stair Treads are being installed—both on new and old stairs—because they meet the high standards school authorities demand.

A sample tread and detailed information will be forwarded to members of schoolboards for examination. Write to:

THE SAFETY STAIR TREAD COMPANY
P. O. BOX 198-C, WOOSTER, OHIO

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SAFE—GROOVE STAIR TREAD



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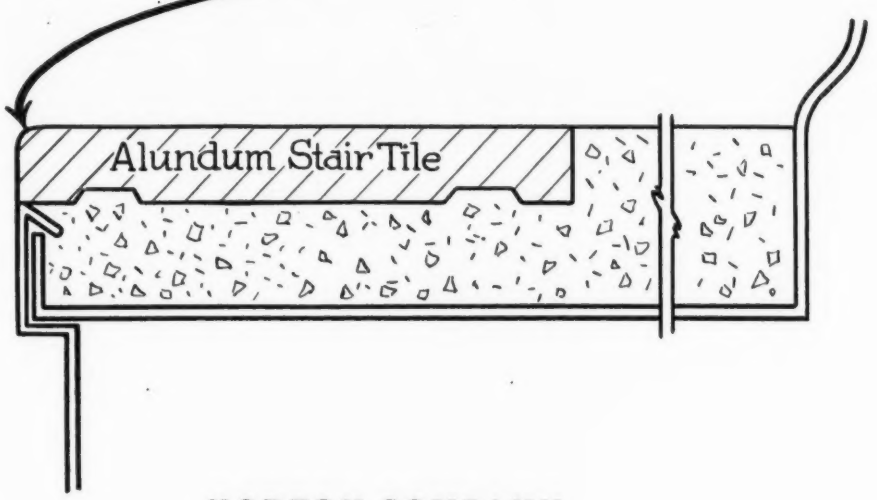
and with an Economical Form of Construction

The very nose of a tread is the real danger point for it is there that the foot pivots when descending a stairway. A tread that has a non-slip surface but a metal nosing fails at the most important place.

Alundum Stair Tile, installed as illustrated, assures maximum safety. Its entire surface is permanently non-slip whether wet or dry and there are no grooves nor corrugations to cause tripping.

And the hardness and toughness of Alundum abrasive enables this tile to stand up indefinitely even under the heavy traffic which school stairways receive.

Economy is another feature, too. The type of steel construction illustrated provides at reasonable cost a fire-proof stairway with non-slip-durable treads.



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T-217

NORTON FLOORS
Alundum Tiles, Treads & Aggregates

(Continued from Page 92)

—The board of education of Rock Island, Ill., has ordered a $600,000 tax levy, of which amount $150,000 will go for new buildings.

—The school board of East St. Louis, Ill., has agreed on a budget of $1,250,000 of which amount $310,000 will go for new construction work.

—The question of providing the school system of Cleveland, Ohio, with an administration building to be erected on the Mall as a part of the civic center, is to be submitted to public approval in the form of a bond election.

—The school committee of Boston, Mass., has adopted a maintenance budget of $15,094,762. In addition to this, the committee has approved an appropriation of $1,712,628 for repairs. The sum of $3,000,000 will be used for new sites and buildings.

—The joint school board of Manchester, Conn., has appropriated a total of $389,226 for the 1928-29 budget.

—A loan of $300,000 for a new school was approved by Haverford (Landsdowne) Pa., by a vote of 673 to 95.

—The voters of Marshfield, Oreg., have turned down the school budget of $117,228 and a proposition to increase the school-tax levy by more than six per cent.

—A tax levy of $550,000 was approved by the board of education of Moline, Ill. The tax, after its approval by the board, is collected by the county. Because of the state law which doubled the assessed valuation of property in Illinois, the levy is 2 per cent of the total valuation of $24,000,000 instead of 4 per cent of the $12,000,000 assessed valuation of last year.

—The school board of Hastings, Nebr., adopted a budget which calls for $250,000 for the operation of the schools, and $50,000 for bonds and interest.

—Albert F. Walsman, business director of the Indianapolis, Ind., board of education, announces that for the first time in ten years, that the city will ask for the same school levy as the preceding year's tax levy and that a lower rate will be sufficient. The rate last year was $1.03 on each $100 of taxable property.

—Superintendent of Schools, H. V. Calhoun, of Belleville, Ill., estimates that the per-pupil cost of education for that city is about $54. The tuition fees have been fixed at $16 for kindergarten pupils, $20 for the first three grades, $24 for the next three grades, and $36 for the seventh and eighth grades.

—The school budget of Marshalltown, Iowa, has been reduced from $291,000 to $286,000. Reduction in the expenses of operating the schools of the city has been made possible despite the anticipated increase in expenses due to the new senior-high-school building. For five consecutive years the city has claimed the distinction of having the lowest school tax per pupil of any city in the state, and present indications give promise of seeing Marshalltown at the head of the list for low school expenses another year.

—The school board of Decatur, Ill., has invested $350,000, received from the recent sale of $400,000 bonds in third liberty bonds maturing Nov. 15, 1928.

—A budget of $537,137, adopted by the school board of Elgin, Ill., is an increase of $22,254 over last year. Chairman P. E. True explained every item of increase, the largest being the salary increase.

—The budget submitted by Supt. Warren A. Hanson to the school board of New London, Conn., calls for $339,571, same as last year. It must be approved by the city council. While the salary item is increased, the repair item is decreased.

—Superintendent S. S. Nisbet's budget submitted to and approved by the school board of Fremont, Mich., calls for $61,275.

—By a vote of 52 to 12, the citizens of Linton, N. Dak., approved a 10-mill levy for school bonds.

—The members of the school board of Muskegon Heights, Mich., received a salary of $300 a year, and the secretary and treasurer each $600 a year. On motion all salaries were unanimously abolished. The board renewed its contract with one of the local banks whereby 2¾ per cent is received on all

(Continued on Page 96)



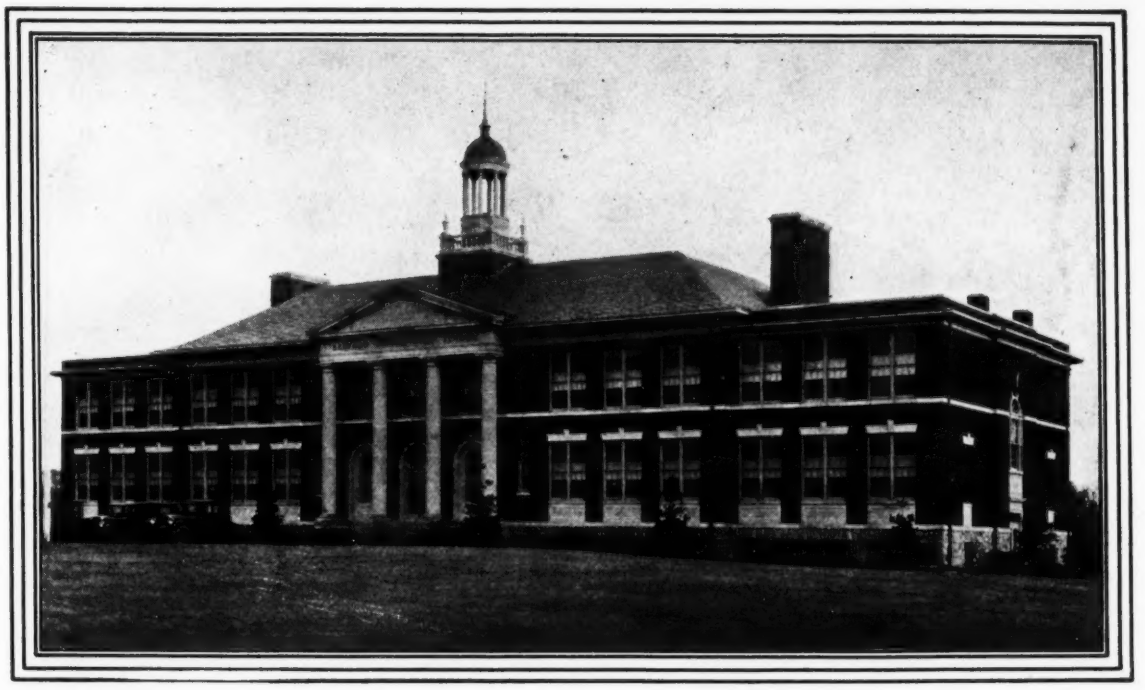
THEY ALL ATTENDED SUMMER SCHOOL

Photo shows the seven members, all female, of the one family, who attended the summer session of the Kansas State Teachers College at Pittsburg, Kans. In the group are shown three granddaughters, three daughters, and the grandmother. The youngest is 9 and the oldest 54. Mrs. E. E. Shipley, the grandmother, shown seated second from right, made the honor roll this season, as she did last year. (Int. Newsreel Photo.)

DUPLEX-A-LITED



Bedford Junior High School
Westport, Conn.
W. B. Tubby & Son,
Architects





D 261

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Surely children's eyes deserve this better light. In youth, eyes are saved or spoiled for a lifetime. Not all children have equally good eyes. Therefore average lighting is not enough. Be fair to the most unfortunate—insure all an equal chance for an education. Give school children the best possible light and plenty of it. The cost is less than the actual expense of student retardation due to poor light.

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SAVES THEIR EYES FOR LIFE

With Duplex-a-lite there are no sharp shadows—no harshness, no glare. 80 per cent of their light is softly diffused from the ceiling. 20 per cent remains for direct illumination. Only these proportions satisfy all visual requirements.

Therefore children study better under Duplex-a-lite, tire less, because there is no eye strain.

Duplex-a-lites are attractive fixtures. They are easy to clean and cost less to maintain, as there is a minimum number of breakable parts. The use of Duplex-a-lite will save you money and help both children and teachers. So often have these facts been proved that all we ask is an opportunity to demonstrate Duplex-a-lite under your own conditions.

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Babson Statistical Laboratory, Wellesley, Mass.
Newton Vocational School, Newton, N. J.
Polytechnic Institute, Brooklyn, N. Y.
University of Wisconsin, Madison, Wis.
John Crerar Library, Chicago
Hershey High School, Hershey, Pa.
La Salle Extension University, Chicago
West Hartford Schools, West Hartford, Conn.
New York University, New York City
Southington Schools, Southington, Conn.
Alhambra High School, Alhambra, Calif.
Public Schools, New York City
Santa Maria High School, Santa Maria, Calif.
Selma High School, Selma, Calif.
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Please send me samples and full information about Tontine, the washable window shade.

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(Concluded from Page 94)

sums up to $50,000 and 2¼ per cent on all over that sum. The bank is obliged to provide a $50,000 bond.

—The school budget of $809,928 was passed by the board of education of Ann Arbor, Mich. It represents an increase of $9,958 over the previous year. The tax rate is to remain the same at $15 a thousand. The entire increase comes through instructional costs.

—The school budget of Milwaukee, Wis., for 1929 calls for $8,878,546, of which $7,600,000 must be raised by taxation which is an increase of $882,854 over the present year. The new budget also calls for $1,240,000 in school bonds. The budget goes to the city council which must levy a tax sufficient to cover the required sum.

—Alton, Ill., adopted a school budget of $406,930 which is $47,542 more than that of last year.

—The school board of South Williamsport, Pa., reduced the tax for school purposes from 30 to 16 mills owing to the fact that the assessments were increased threefold in order to float a bond issue.

—In 1913, the school cost per pupil in this country was $38.31, and at present they are $102.50, according to the U. S. Bureau of Education. The expenditures for new school buildings have been doubled since 1920.

—Albert F. Walsman, business manager for the Indianapolis, Ind., school system, has prepared a bill to be presented to the legislature providing for serial school-bond issues whereby the payments will be spread over a period of years. The board of education will face a situation in 1939, when $4,520,000 in bonds will mature. Mr. Walsman cites figures to show that $12,441,000 in school bonds has been issued since 1900, on which the city will pay 90 cents interest on every dollar of bonds due, a total of $11,282,867 for interest alone.

—The board of education of Boontown, N. J., instead of seeking an open market for its proposed issue of $261,000 bonds, has awarded the same to the state teachers' annuity fund. They are to mature at the rate of $7,000 a year, beginning in 1930, and from date to 1965 at the rate of $9,000 a year.

—The budget for the Chicago schools calls for $84,000,000 of which $48,000,000 is for the educational department. The balance of $40,000,000 will go for new buildings.

—In order to avail itself of discounts, the school board of Lima, Ohio, has found that bills must frequently be paid before the board acts upon them. It is now discovered that no bills can legally be paid unless authorized by the school board.

—Omaha, Nebr., has approved a school budget of $4,350,500 for the coming fiscal year.

—The board of education of Dayton, Ohio, has fixed its budget at $3,834,081. This is an increase of $19,832 over last year. The budget will be submitted for a public hearing.

—The school board of Ferndale, Mich., voted to issue certificates on which to borrow $170,000 due the board from delinquent taxpayers.

—Out of each dollar which the city of Detroit, Mich., collects in taxes the board of education receives the largest fraction, namely 28.8 cents.

—In the state of Arkansas, 1,207 districts in which 38,855 pupils were enrolled, had an average assessed valuation of $13,109 each, while the average enrollment is 32, or $410 per child. The Pine Bluff Commercial in commenting on the situation says:

"The weakness of the present system of public education can be made apparent in citing one condition. On an 18-mill basis, the 1,207 districts rated at less than $20,000 in property valuation can raise only $235 annually on the average. The second group, classed from $20,000 to $50,000, can from the 18-mill tax produce no more than $575 annually. Yet the first group has in each district an average enrollment of 32, and the second group has an average of 47."

—The school budget of Davenport, Iowa, was approved at $925,000. There is no change over last year. The school-tax levy of 55.02 mills remains the same.

—The 1929 budget prepared by the board of education of Cincinnati, Ohio, calls for $8,376,000. This is an increase of $498,250 over the current year and represents an additional .28 of a mill. This means that this year's tax rate of 7.35 mills may be raised next year to 7.63 mills, or $7.63 on each $1,000 of property valuation.

—The board of education of Owosso, Mich., has adopted a budget totaling $318,894 for the next fiscal year. The tax rate will remain the same as it was last year, $15.60 per $1,000 valuation. The budget was presented to a public meeting of taxpayers for approval. The total assessed valuation of the district is $13,921,130.

—The state apportionment of school funds for the public schools of Missouri will total $4,244,047 this year. This is an increase of $634,168 over last year.

This fund represents one third of the general revenue receipts of the state, set aside by law for distribution to the public-school districts. The funds are distributed to the counties by the state, on the basis of the number of pupils in the schools, days attendance the previous school year, and the number of teachers. The counties distribute the funds to the public-school districts on the same basis. The increase in the amount available this year is due to increases in collections of the state income tax and state inheritance tax, which constitute two of the principal tax items in the general revenue fund.

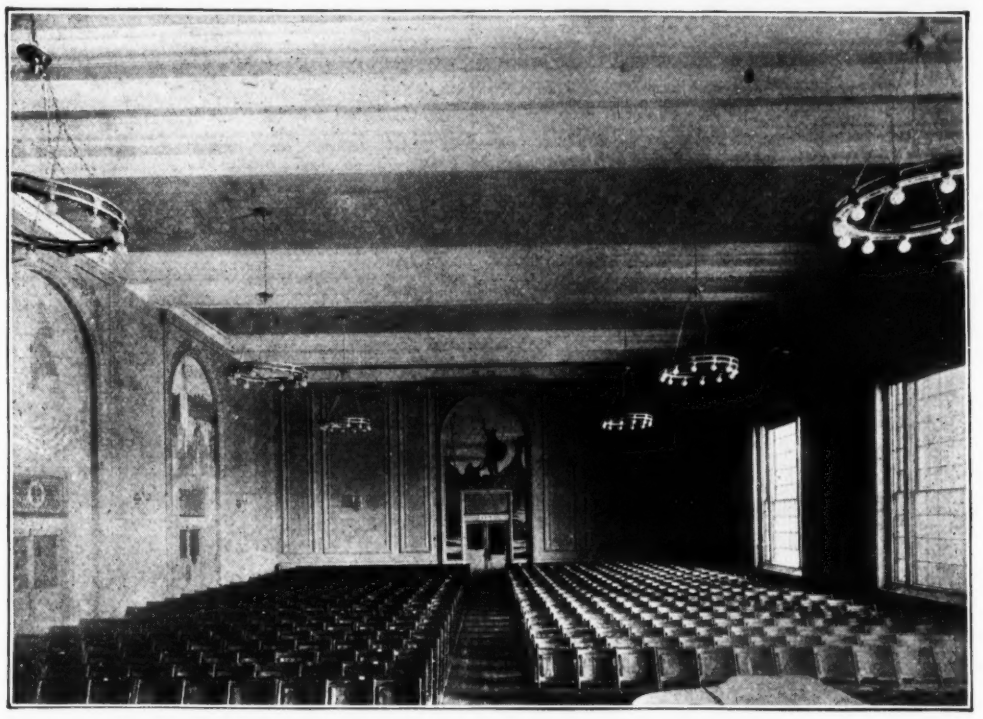
—The 1929 budget of the school system of Lima, Ohio, will be $77,155 higher than 1928, making a total of $680,940. During a prolonged discussion by the school board, it was stated that the board faces a "grave economic situation," because of the deliquency in tax collections.

—The school system of New Orleans, La., has been allotted $115,000 out of the state fund intended for the purchase of textbooks. The fund was made available through the severance tax recently voted by the state legislature.

—The school board of New Britain, Conn., contemplates a $1,000,000 bond issue to be used for a new senior-high-school building.

—The mayor of Boston recently refused to sign the appropriation order of the school board for June 25, 1928, amounting to $6,384,262, for the reason that the appropriations include the necessary costs of maintenance and other expenses for the financial year 1928, also a substantial surplus representing an amount not intended to be used for the expenses of the current year. The mayor pointed out that in appropriating a surplus for this purpose a burden is placed on the taxpayer of the current year for a substantial amount that should not be included in taxation until the following year. The school board has, however, passed the budget over the mayor's veto.

(Concluded on Page 99)



This auditorium in the North Side Junior High School, Waltham, Mass., is protected from disquieting noises and echoes with Acousti-Celotex F. E. Berry, Jr., & Co., Inc., Acousti-Celotex Contractor.

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Billions of public money has been invested in schools. Often a community's greatest pride is its school, where the pliable minds are being shaped into character. What you teach these children today they will enact tomorrow. In these circumstances, "clean enough" is not sufficient.

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As evidence, the following excerpt from a letter from the Custodian of Bayonne Junior High and Vocational School will be interesting:

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For every school there is an efficient and economical FINNELL System—eight sizes of scrubber-polishers permit adaptation to any needs. FINNELL floor maintenance engineers will gladly examine your floors, tell you the best way to care for them, and show you the cheapest and most efficient method. To get this information does not cost you more than a postage stamp. Write us today. Address FINNELL SYSTEM, INC., 259 East St., Elkhart, Ind. Also Standard Bank Bldg., Ottawa, Ontario, Canada. Factories, Elkhart, Ind., Hannibal, Mo., and Ottawa, Ont., Canada. District offices in principal cities.





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Liquid Scrub Compound

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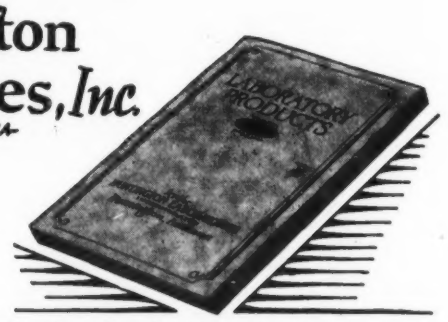
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Wherever waste accumulates

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SOLAR -STURGES MFG. CO., Melrose Park, Illinois.

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(Concluded from Page 96)

In his statement, the mayor points out that the appropriations voted this year and submitted for approval, indicate either faulty budget-making, or they represent a mistaken policy to appropriate for the purpose of creating a substantial surplus. If the budget-making system is faulty, then he urges that radical methods be adopted for improvement. If the appropriations made are intended to provide for an amount of money more than is needed for the year, then he urges that the school board eliminate its detailed estimates since they represent merely a padded budget.

The budget estimates provide for a total of $15,000,662, or $1,003,610 in excess of the expenditures for 1927. In the list of items, the largest amounts are $11,548,438 for salaries of instructors, $1,099,485 for supplies and incidentals, and $845,710 for salaries of custodians. Such items as alterations and repairs, and pensions for teachers are excluded from the table.

—Erie, Pa. The board of education in the administration of the schools has made every effort to conduct the business of the schools in the interest of economy as well as efficiency in operation. A survey of school costs made by the state education department covering second-class districts of Pennsylvania shows that, while the average per cent of the total current expense in second-class districts has been $74.27 for the year 1926-27, the percentage in the Erie district has been only $69.57. This shows that while the school board is offering all modern school facilities, it is maintaining a rather commendable record of economy. With such a policy, the board can with confidence enlist the cooperation and support of the citizens in any worthy educational project.

—Cincinnati, Ohio. The board of education has adopted its budget for the year 1929, showing a total of expenditures of $8,880,857. Of this amount, the largest single item is $6,444,065 for instruction purposes, and the second largest item is $1,190,168 for business management.

The estimated net increase in the budget is $500,000. As there is a decrease of $190,000 in the requirements of debt service and teachers' retirement funds, the needs of the general instruction and physical upkeep of the school plant show a required increase of about $690,000 over the last year. The items which make up the greater part of this sum are the automatic increases in teachers' salaries, $390,000; increases in other salaries through civil-service schedule, $45,000; equipment for new schools, and for expanded schools, $128,000; increases in cost of operation and maintenance for new schools, $34,000; increase in contingent fund for assessments and water charges, $50,000.

—The board of education of Fargo, N. Dak., has agreed upon a budget of $619,950 for 1928-29, an increase of $19,700 over last year's budget. The board receives $75,000 from the state, thus calling for a local levy of $544,950. The budget allows $285,000 for teachers' salaries compared with $255,000 for last year.

—The $300,000 bond issue for a new high school proposed by the school board of Chambersburg, Pa., was defeated by a vote of 1,102 to 1,030.

—A $600,000 bond issue to provide four new grade schools is proposed by the board of education of Indianapolis, Ind. The project was vetoed by the state tax board because the heating and ventilating system was not placed upon a competitive basis.

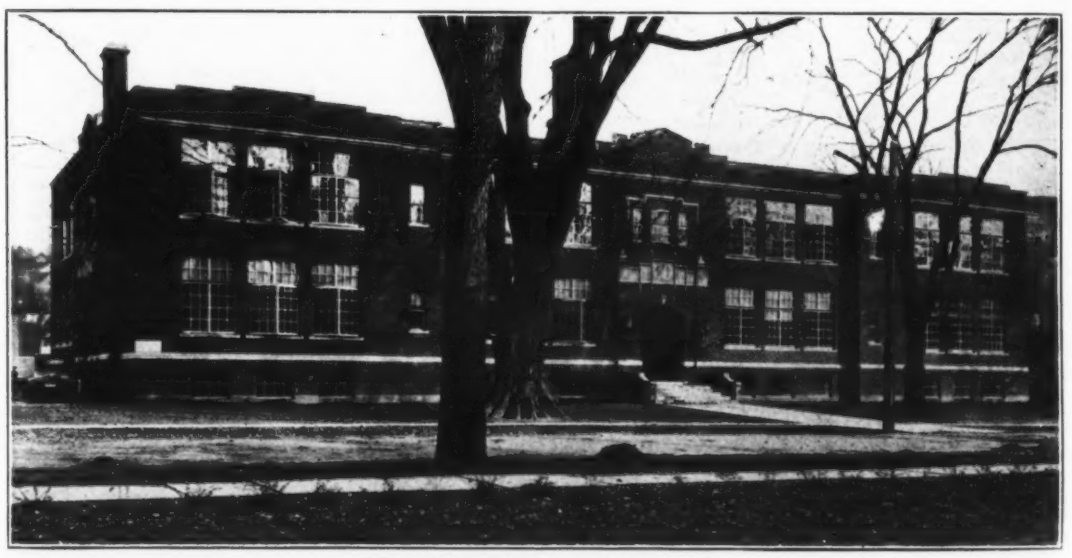
—Last year the tax levy for all school purposes at Norwood, Ohio, was $7.19. This year it has been reduced to $6.80. This will net the board of education $533,622.

—The board of education of Carbondale, Pa., hired a detective agency to investigate the recent theft of 2,551 vouchers from the board's safe.

—A dispute lasting five years between the school board of Buffalo, N. Y. and Charles H. Everitt, a contractor, was settled for the sum of $21,000. The question was over extras for excavation of rock on the Bennett high school job.

Mr. Everitt submitted the claim to the school board about five years ago. The board applied for a board of arbitration. The arbiters decided that the board would have to pay the claim. An appeal was taken to the supreme court which held that the court would have to pay. An appeal was then taken to the appellate division. This appeal was decided unanimously against the school board.

The school board of Accomack county, Va., has passed a resolution barring married women teachers from the schools. Those now employed may remain. The board has been informed that some unmarried applicants are superior to some of the married women now employed.



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BUILDING NEWS OF THE SCHOOLS

INCREASE THE GENERAL SCHOOL-REPAIR FUND FOR 1929

Upon the request of Superintendent of School Buildings, Walter C. Martin, the budget committee of the New York City board of education has added $1,200,000 to the general repair fund for repairs to school buildings throughout the city. For foreseen repairs to school buildings, the bureau of construction will expend $3,000,000 next year, as against $2,000,000 this year. The budget allowance for unforeseen repairs was increased from $575,000 this year to $775,000 next year.

Fire-prevention work will be carried out on the same scale as last year. The budget committee has approved an expenditure of $225,000 for the removal of fire hazards from old school buildings.

Supt. Walter C. Martin has pointed out that it will be necessary to employ 108 additional inspectors and draftsmen to carry forward the school-building program for 1929. The additional help will be furnished as needed from funds provided by the issuance of corporate stock. Funds have been allowed for continuing the present force of 361 inspectors and draftsmen. An item of $13,000 has been included in the budget for the employment of five additional mechanics. The payroll for the present force of the school-building bureau amounts to $180,792. The present allowance of $187,464 for the office staff of the building bureau will be continued for the next year.

TO BUILD ADMINISTRATION BUILDING

—New York, N. Y. The board of education has approved a recommendation of the committee on buildings providing for the erection of a new headquarters building for the administrative department. The project which has been included in the $33,000,000 school-building program is the only one which has been definitely provided for in the corporate-stock request for new buildings as approved by the budget committee of the board of education.

While the exact location of the new building has not been determined, it is proposed that the building shall be erected on the site of former Public School 27, in Manhattan. This site is well suited for the purpose because of its central location and also because it has frontages on two streets.

The present administrative offices are housed in four buildings, two of which are located in Manhattan, and two in Brooklyn. Because of this decentralization of the various bureaus, school officials find their work considerably hampered as the school system grows from year to year. It is believed that a modern office structure with all departments under one roof will save much valuable time and would make for more efficient administration.

A PROGRAM OF SCHOOLHOUSING AT NORTH BERGEN, N. J.

Supt. M. F. Husted of North Bergen, N. J., in his latest annual report to the school board, points to the rapid growth of the town in population and in school needs, and shows how the school needs have been met. Following the world war, the community was left with an abnormal inheritance of excessive construction costs, owing to the rapid growth of the population.

In connection with plans for meeting the school situation, a conservative estimate fixed the rate of growth in population at 60 per cent, giving North Bergen a population of 37,350 in 1930. It was brought out that the actual rate of growth will approximate 70 per cent, giving a population of 40,000 due to the rapid development of good schools, a wise financial management and a low tax rate. The growth in population is given as follows:

		Conservative Estimate For	U. S. Census For New Estimate
Census		1890	1900
1910	1920	1930	1930
Population		5,715	9,213
15,662	23,344	37,350	40,000

A conservative estimate of the grammar-school enrollment in 1930 and the actual enrollment for census years is 8000 pupils. This estimate, it is conceded, is more likely to be low rather than high.

The statistics show that there has been a steady increase in grammar-school graduates and in high-school enrollment. The gain in high-school enrollment in 1927-28 was 91, giving a total enrollment of 780. Until 1920, the total high-school enrollment was less than the number of grammar graduates, while at the present time the school system is graduating more than 400 pupils from grade eight. In 1930, it is expected that fully 500 pupils will be graduated, and that from 900 to 1,000 students will be cared for in the high school. The present need is for a high school with a capacity of 1200 to 1400 students, thus making it unnecessary to distribute these students among six different high schools. The grammar-school enrollment has grown from 338 in 1923 to 430 in 1928, and the high-school enrollment from 515 to 780 in 1928.

Beginning with the year 1927-28, the Robert Fulton school was placed on a full-time schedule for all classes. School No. 9, which is under construction, is expected to relieve some of the part-time pupils to an extent. With the rapid construction of the building, a part of the building may be occupied for the second term and thus a part of the congestion will be relieved. At present, only the Lincoln school remains on a part-time schedule, with twelve classes in need of immediate attention.

The school system has 780 high-school students who are unprovided for and who are distributed among five nearby cities as follows: Jersey City, 65; Cliffside, 14; West New York, 183; Hoboken, 47; Union City, 471.

Mr. Husted closes his report with a plea for good schools and the hope that the new high school may be shortly placed under construction in order that the students may enjoy the opportunities it affords and as a crowning event of his educational service.

BUILDING NEWS

—New York, N. Y. Sittings for 16,656 children in eleven new school buildings, or additions, will be available on September 10, according to a report of Supt. Wm. J. O'Shea. Five new elementary schools and 5 additions to present elementary schools, with accommodations for 12,036 pupils, and 1 new high school, the Roosevelt, in the Bronx, with 4,620 sittings, are to be ready for use at the beginning of the new school year. At least 1 new building will be opened in each borough. Queens Borough heads the list with 4 new structures, and Bronx is second with 3 new buildings.

Gains per cent			61.2
69.9	49.0	60.0	70.0
Grade enrollment			1,600
3,399	4,911	7,470	8,000

—The Houston, Tex., school-building program made possible by a $4,000,000 bond issue, will be used largely for the construction of new high schools. The architects thus far chosen include Hedrick & Gottlieb, L. Q. Cato, L. A. Glover, Thiel & Moddrey, H. D. Payne, and R. D. Steele, all of Houston.

—The school board of Wheeling, W. Va., has purchased two portable school buildings from the Dobson-Evans Company, Columbus, at $4,790. The buildings measure 22 by 68 ft.

—The construction of new schools and additions as provided by the $10,000,000 loan authorized last spring by the voters of Baltimore, Md., was begun during the summer months.

—Erie, Pa. Among the projects proposed under a recent bond issue approved by the citizens is the building of the new West High School. This building will provide relief for the three overcrowded schools in the vicinity and will complete the high-school building needs of the city for several years to come.

—Rahway, N. J. The Grover Cleveland School, which is nearly completed, will be ready for occupancy in September. The building has fifteen rooms and is the third grammar school to be erected in the last seven years.

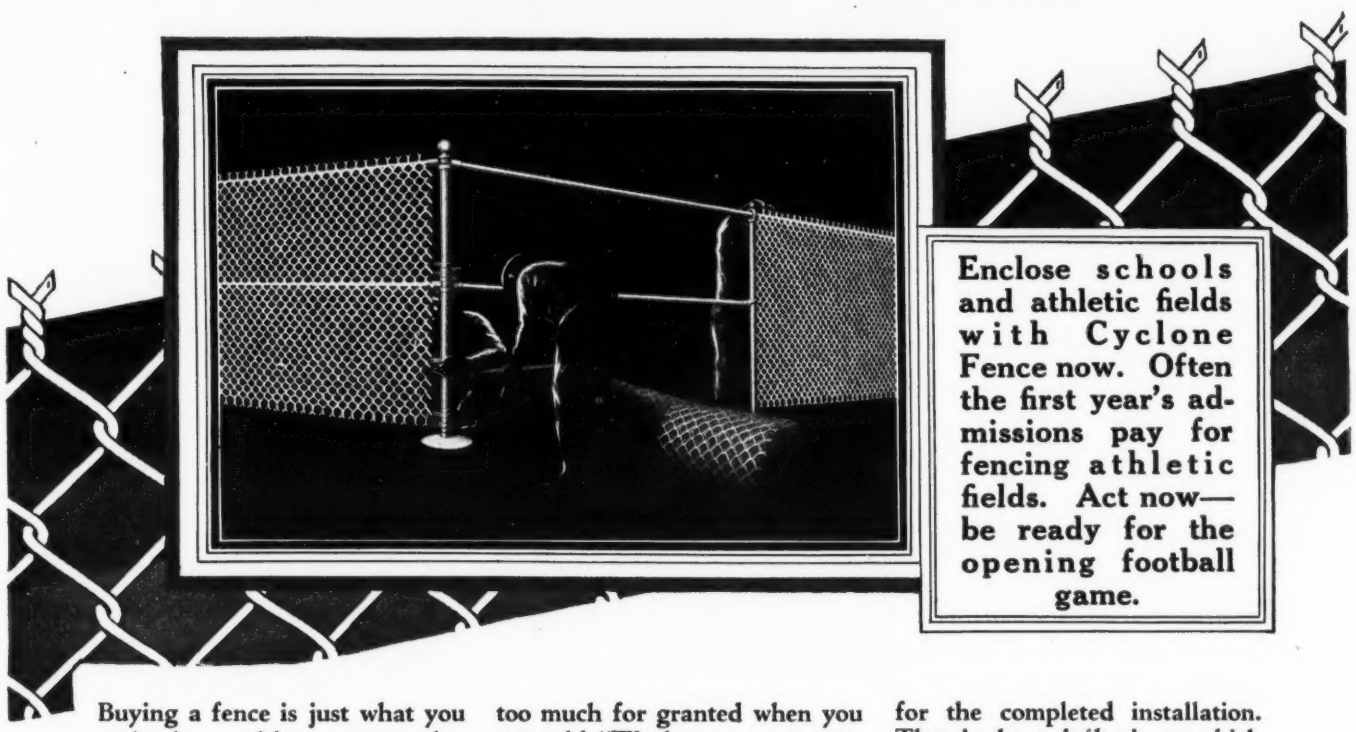
—Hamilton, Ohio. The school board has adopted an extensive school-building program for the school year 1928-29, which calls for an expenditure of $1,500,000 during a period of two years. Work on the first part of the program was begun on August 1.

Richmond, Mo. Two new buildings are in process of erection at the present time. The Woodson

(Continued on Page 102)

A SITUATION

•• YOU COMPLETELY CONTROL ••



Enclose schools and athletic fields with Cyclone Fence now. Often the first year's admissions pay for fencing athletic fields. Act now—be ready for the opening football game.

Buying a fence is just what you make it — either a sure-value purchase, or a risky transaction. Strange as it may seem, it is possible to buy good fence materials and yet get an unsatisfactory fence job. If you start with poor materials, disappointment is sure.

But why take an unnecessary risk? Start right—choose a good fence, made of copper-bearing steel, with full-weight materials throughout, all heavily hot-dipped galvanized. Equally important, find out, before you buy, the exact details of the erection methods to be used, and exactly who will do the work of erection. Don't be satisfied with evasive answers such as "We take care of erection." Don't take too much for granted when you are told "We have a representative in your city." Make sure the company who manufactures the fence will actually erect it and be responsible for the finished job. No fence can give long service at low annual cost unless it is properly erected.

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Cyclone is a national organization of fence specialists with six large factories making fence exclusively, 13 fully-stocked warehouses located for quick shipment to any locality, and direct factory branches in all principal cities, owned and manned by the Cyclone Fence Company. Cyclone Service — quick, complete and efficient — is available everywhere.

Call a Cyclone Fence Specialist

The Cyclone Fence Company will send a man who is equipped to discuss fencing with you intelligently — a man who has worked in one of the Cyclone plants, studied fence application in the field and actually erected it. Ply him with questions on any phase of fencing, consult him on any specific problem — you will find him prepared to furnish convincing proof that Cyclone Fence and Cyclone Service constitute maximum fence value. *It pays to buy fence from an organization of fence specialists.* Write, phone or wire nearest offices.

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Tell me about your 30-Day Trial Offer.

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(Continued from Page 100)

School, a one-story type, will house 300 grade pupils. The Lincoln School for colored children will contain classrooms for 150 pupils. The buildings, which are of type C construction, will be ready for use in September. Mr. Price L. Collier is superintendent of schools.

—The board of education of Monroeville, Ohio, with the assistance of Hulsken and Strong, architects, agreed upon plans for a new high-school building. A bond issue of $146,000 is to be voted in November.

—Virginia, Minn. The school board has approved the plans for a school building to cost $450,000.

—A 20-room grade school will be erected at Fairmont, Minn., this fall. An addition to the senior high school to house the junior high school, will be started in the spring. The funds for the construction work were provided through a bond issue of $250,000. Mr. George Pass, Mankato, is the architect for both buildings.

—Biloxi, Miss. The school board is erecting an elementary school, to cost $83,000, and a gymnasium, to cost $20,000. The funds for both buildings were derived from a bond issue of $100,000.

—Roselle Park, N. J. An addition containing seven classrooms and an auditorium has been erected for the Sherman School, at a cost of $160,000.

—Indianapolis, Ind. An additional building program, including six elementary schools, has been announced by the board of education.

—Euclid, Ohio. Additions to the school buildings are planned to take care of an anticipated increase in attendance. The estimated cost of the new buildings is $900,000.

—Lorain, Ohio. The first step in the new building program of the board will be taken in November, when the citizens will be asked to approve a bond issue for the erection of a addition to the Hawthorne School.

—Cleveland, Ohio. The school board, with more buildings under its control than the city of Cleveland, carries its own fire insurance at a much smaller cost than the city, according to a report of City Examiner W. E. Heck. Under the plan, the school board carries its own risks by appropriating $25,000 each year toward an insurance fund. The city on the other hand, buys insurance from various sources and pays premiums amounting to $57,000 per annum.

—Fort Wayne, Ind. The school board has placed on sale an issue of $290,000 in school-property bonds, bearing 4 per cent interest. The proceeds of the bond-issue sale will be used for the erection of additions to two schools.

—The preliminary plans of the Cleveland, Ohio, school-board-headquarters building, for which a bond issue of $2,000,000 will be placed on the ballot this fall, have been submitted to the city plan commission by School Architect George M. Hopkinson. The building, which will be of stone, will be five stories high, and will conform to the architectural style of the public auditorium and library. The site for the building has been purchased at an appropriate cost of $600,000.

—Springfield, Ohio. The civic improvement committee has asked that the school board prepare a definite program of its building needs covering a period of five years. Supt. F. M. Shelton, who appeared before the committee, pointed out that the schools are filled to capacity and that a sudden increase in enrollment might produce serious overcrowding in the schools. Mr. Shelton showed that during the past ten years there has been a gain of 2,850 pupils, with an average yearly increase of 285 students.

Mr. Shelton pointed out that the average building houses 400 students. An increase of 3,000 students within the next ten years would mean six new buildings of average size, or three large buildings with a capacity of 1,000 each as actual building needs.

—Crookston, Minn. The board of education undertook a program of repairwork this summer, which was completed at a cost of approximately $4,000. The various projects included in the program were interior decorating, renovation of desks, reshingling, installation of slate blackboards, and minor repairs. The average expenditure for the repair of buildings and equipment for the past four or five years represents 3½ per cent of the entire school budget.

—Winona, Minn. A new auditorium-gymnasium building is in process of completion.

—Lexington, Mo. A full-time supervisor of school buildings was employed by the board of education during the past year with considerable success. The plan proved so satisfactory that it has now been made permanent. Under the direction of the supervisor, Mr. J. E. Dixon, the buildings have been better maintained, with a material reduction in the cost of operation and maintenance of the school plant.

—Owosso, Mich. The citizens recently voted $468,000 for the erection of a senior-high-school building. Mr. W. B. Ittner, St. Louis, will be the architect.

—Crookston, Minn. The junior- and senior-high-school principalships in the city schools have been consolidated, with the appointment of Mr. J. M. Chapman as principal. The enrollment of the two departments is a little more than 600 students, who are under the instruction of 23 full-time and 4 half-time teachers.

—Crookston, Minn. The teachers in the city schools are required to attend summer school once in three months in order to receive the maximum salaries to which their training and experience entitle them. Twenty per cent of the teachers are in attendance at some university or teachers' college this summer.

—Students of the public schools of Pittsburgh, Pa., will receive regular lessons by radio, beginning with the fall term in September, according to a recent statement of Supt. W. M. Davidson. Each school in the city will be equipped with a receiving set and amplifiers and the lessons will be broadcast through station KDKA. A studio from which the broadcasts will be made is to be established in the administration building of the board of education.

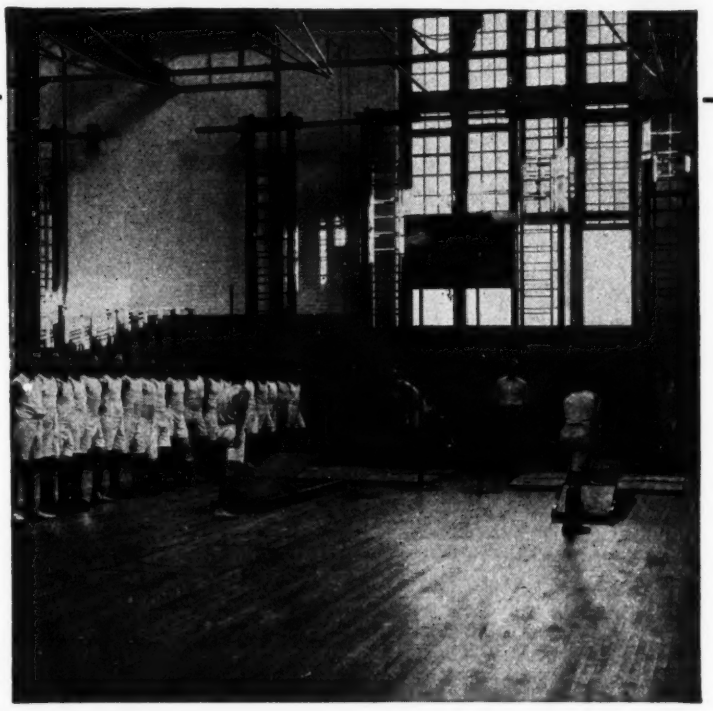
Through the radio, it will be possible for all students in the schools to hear simultaneously an address by a speaker of note. In making a radio speech, the speaker will be addressing more than 100,000 students, ranging in ages from 7 to 20 years. It is expected that the new plan will be adopted by other schools throughout the country.

Mr. Andrew J. Keeley, a local building contractor of East St. Louis, Ill., has been appointed as supervisor of school buildings, to succeed F. L. Thrasher. Mr. Keeley has had considerable experience in building construction, especially school buildings, and has supervised the erection of a number of large buildings in various sections of the country.

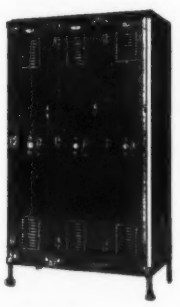
—Waterbury, Conn. The school board has ignored a request of the mayor that the school-building program be curtailed, and has ordered that the program as outlined be carried out. The board has intimated that there will be a reduction of the maintenance items as far as possible in line with the mayor's retrenchment policy. The building program covers a period of two years and calls for an expenditure of nearly $1,000,000.

(Concluded on Page 104)





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Gymnasium Work
for Every Student



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LANDIS ENGINEERING & MFG. CO. — WAYNESBORO, PENNSYLVANIA

(Concluded from Page 102)

—Springfield, Ill. The school board has approved a report of the special committee calling for improvements in the direction of fire hazards, at a total cost of $50,000. The report of the committee followed, in general, a survey of school buildings made to the board by the state fire marshal and the chief of the city division of fire prevention.

—Houston, Tex. The $4,000,000 school-building program of the school board has been started with plans for work to cost $1,000,000. Bids on additions to three schools have been advertised, and approximately 25 classrooms will be added to each building. Bids will shortly be received for additions to two further schools.

—A school-building program, which will call for $7,000,000, is under consideration by the board of education of Wilmington, Del. This program which is recommended by Supt. David A. Ward means a rehousing of the entire school system. It includes a $3,000,000 senior high school and several new grade schools.

—Buffalo, N. Y., will spend $3,000,000 for new schools. The project has been approved by the city council. That body also voted a $548,000 bond issue for school additions.

—Rochester, Minn. A four-room addition to the Hawthorne school was completed on August 20. The building which was enlarged at a cost of $60,000, will provide additional seating accommodations for two buildings in addition to the Hawthorne school.

The public-school system of Rochester, Minn., has reported a total school enrollment of 3,629, or an increase of 335 pupils. The junior high schools reported an increase of 97 students, while the junior college had an increase of 22 students.

The growth in the high school, it was shown, has been the most rapid. With a population of 17,000, and a high-school enrollment of 714, the high-school attendance per 1,000 was 42, or two above the average of enrollment for the state as a whole.

—Rochester, Minn. One of the outstanding activities of the board of education during the past year was the floating of a bond issue of $200,000 to provide for an addition to the Hawthorne school and the building of a central heating plant. The acceptance of an offer by the municipal authorities to furnish heat for the high school and central building has since made it unnecessary to expend $130,000 for a new plant. If the present growth in home building continues, it is expected that additional buildings for school purposes must be provided in the southwestern part of the city. This will take the form of a unit structure as the first unit of another grade building. In the high school, the continued increase in enrollment will make necessary the release of additional grade rooms for high-school purposes. In order to meet the increase for this year, it has been necessary to distribute the sixth grades of the Central school among three other schools.

—Syracuse, N. Y. The board of education has begun the erection of a number of new additions to the schools. An addition to cost $400,000 is being built for the Central High School; the Bellevue Heights school will have an addition, to cost $150,000; the Lincoln school will have an addition, making it a tenth-year high school; and the Porter school will have an addition, to cost $100,000. In addition to these, a school for crippled children is being erected, at a cost of $300,000.

—The school board of Prophetstown, Ill., voted $62,000 worth of bonds for the purchase of a site and the construction of a new high-school building.

—The board of education of Lackawanna, N. Y., has adopted a building program involving the expenditure of $840,000. Part of this will be used to improve the high school and part for a new grade-school building.

—The new high school at Oneida, N. Y., was dedicated on Tuesday, June 26, with appropriate dedicatory exercises. Addresses were made by Mr. Henry D. Fearon, president of the board of education; Mr. Howard F. Knapp, principal of the high school; and Dr. A. W. Skinner, director of examinations and inspections division of the state education department.

The building which is three stories in height, contains in addition to classrooms, an auditorium, a gymnasium, a lunchroom, and a library.

—The state education department of West Virginia, in the May-June issue of Educational News, devotes considerable space to school-board news, for the purpose of giving helpful information and suggestions to the several boards. The present issue offers suggestions about board meetings, the employment of teachers, school terms, salaries of teachers, the condition of the finances of the schools, the keeping of records of proceedings of the board, and the holding of county conferences of members and secretaries of boards of education.

—North Providence, R. I. The school board has ordered the purchase of a fireproof filing cabinet for the schools. It appears that a state law requires that school records be kept in a fireproof receptacle.

THE SIZE OF SCHOOL CLASSES

The question of the size of school classes has arisen at Indianapolis, Ind. The News of that city says:

"How many children should there be in a schoolroom? If this question could have been answered categorically and numerically, it would have been disposed of as a subject of discussion long ago. But it involves a multitude of problems.

"In the United States, where free education prevails to a larger extent than in Europe, the problem is even more complicated, because the state is committed to the policy of providing a seat for every child of school age. This cannot be literally done, but the school boards attempt to approximate it.

"The other side of the problem came up in Indiana a few years ago when it was found that there were one-room rural schools of fewer than fifteen pupils. In such cases the trustee was authorized to abandon the school if the attendance fell below twelve.

"In the larger schools and in the cities nearly every community has been troubled with insufficient accommodations for the children of school age. There is no law regulating the maximum number, but the ideal is fixed at 35, with a range possible up to 40. Often communities have found that if this limitation were insisted on, more schools, teachers and higher taxes would become necessary.

"There is, of course, a limit beyond which the tax authority ought not to go. One of the troubles of the farmer is that in securing good roads, elaborate school buildings, fine bridges, etc., all of which he enjoys and appreciates, he finds suddenly that his farm is being taxed to death. Likewise in the cities, taxes have become so high as to discourage property owning. It all argues for a reasonable restraint in voting for the best that can be had, regardless of cost. School taxes are probably more willingly paid than any other taxes, but even these may become abusively high. One may protest against an excessive tax rate without surrendering the principle that school facilities must be provided for all children, in other words, universal education is fundamental in this country."

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Your auditorium is quiet, your students intent. In the center of the platform stands a grand piano of famous make. Listen! The hands of a master have touched the keys—Rachmaninoff is playing Chopin. Yet Rachmaninoff is a thousand miles away!

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Special terms and arrangements for payment make the ownership of the Ampico easily possible for most schools. Recordings from the Ampico Library of over 2,000 performances—the playing of 300 of the foremost living pianists—are supplied to educational institutions without charge. A letter to the Educational Department of the Ampico Corporation, Fifth Avenue and 47th Street, New York City, will bring full information.

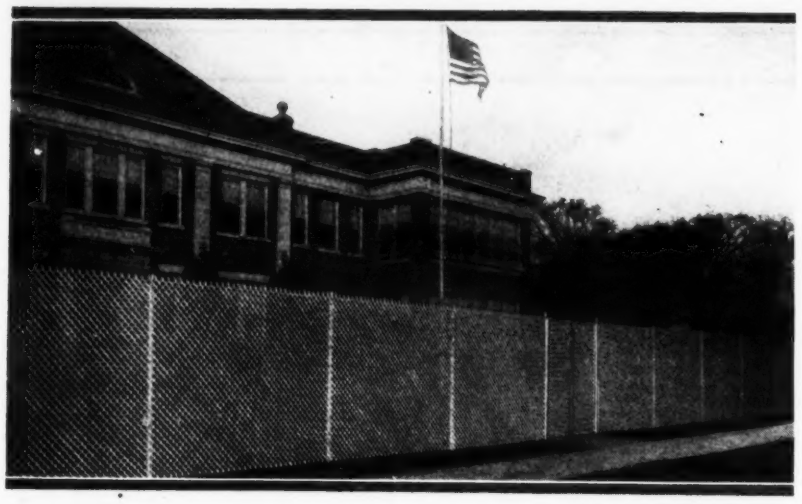
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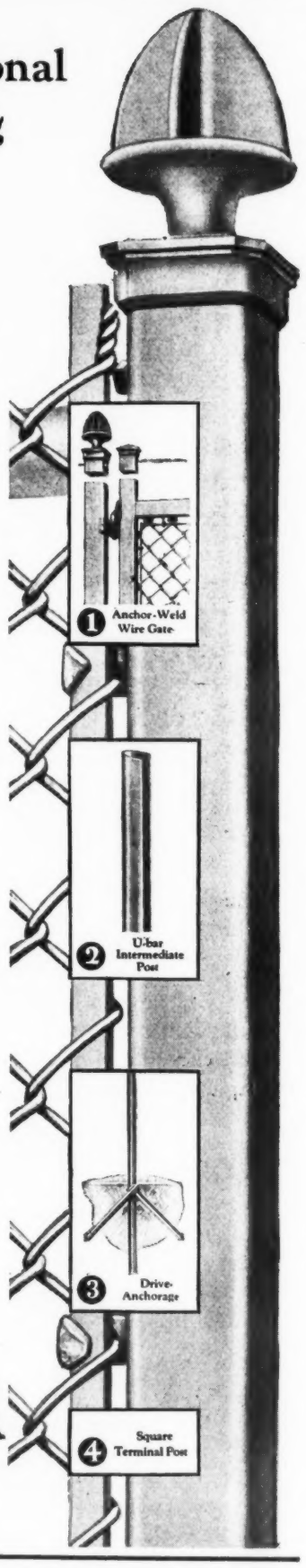
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(2) U-Bar Line Posts of High Carbon Steel are 50% stronger than other posts — size for size and weight for weight.

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Northwestern University

Newton High School
Newton, Kans.

Garrett High School
Garrett, Ind.

Fort Plains High School
Fort Plains, N. Y.

Belgrade High School
Belgrade, Mont.

Inglewood High School
Los Angeles, Cal.

George Washington High School
Danville, Va.

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PHILADELPHIA OFFICIALLY adopts the Dudley Lock. Board orders 12,600 combination locks for new high schools, making school system 100% Dudley.

UNIVERSITY OF ILLINOIS strong for the Dudley. Ben Crackle orders 3,500 for Gym and Stadium lockers.

Dean Jordan insists on Dudley exclusively for engineering students.

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YOST DECIDES ON DUDLEY. Wants best possible locker lock for the new University of Michigan Field House. Orders 1,682 as a starter.

OHIO STATE UNIVERSITY ORders over four thousand Dudley locks for Gym and Mechanical Drawing. They have been Dudley lock users for many years.

RICHMOND, CALIF., GETS 2,860 Dudley combination locks for their splendid new High-School building.

PASADENA, CALIF., REQUIRES 2,000 additional Dudley locks for fall term.

DUDLEY NEWS is *good* news to any school still fussing with keys and antiquated locker systems.

The Dudley Combination Lock is now the standard locker lock of America.

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TEACHERS AND ADMINISTRATION

EXAMINATION METHOD OF CERTIFICATION OF TEACHERS BEING DISCARDED

A recent study of teacher-certification practices in all states by the U. S. Bureau of Education, shows that the examination method of certification is recognized as being inadequate and is being replaced by professional training given in recognized institutions. The Bureau declares:

All states assume definite responsibility for the qualifications of persons licensed to teach within the state. In no state can teachers draw salaries from public-school funds unless they hold a legal teaching license or certificate. In all states there are established certain minimum requirements for teaching certificates and established standards or grades of certificates, based on academic or professional qualifications and experience in teaching.

The power of certifying teachers was vested in local authorities first in practically all states. It has, however, gradually become more and more centralized. At present it is centered in county and state authorities. Cities under certain conditions or of a certain size are exempted in most states. The centralization has come about gradually. More and more authority in certification is placed in the hands of the state department of education. At the present time the certificating authority is placed in the department of education wholly or sufficiently to give the department large authority in all but eight states.

Two methods of securing certificates are recognized in the majority of the states, one by examination under statutory regulations by established state and county authorities, the other on the basis of credentials showing academic and professional training secured at approved institutions.

There is a marked tendency to eliminate the examination method of issuing certificates. This is being done by gradually increasing the qualifications required over a period of years and setting forth a definite prerequisite for any certificate, including the lowest grade of academic and professional training effective at a stated time, usually from two to five years in advance of the time at which the law is passed. This serves to give ample notice to prospective teachers that the amount of preparation must be made by the date set or certificates will not be forthcoming.

There has been marked progress among the states in raising the certificate requirements. The accepted standard for teaching in elementary grades is now two years above high school, representing completion of a standard two-year course in an approved normal school, teachers' college, or university. Graduation from a four-year college course, including professional courses, is the accepted standard for high-school teachers.

While the examination method still persists in a number of states, there is a strong movement to eliminate this method and to make examinations, while they continue, more and more difficult, and hence, of constantly decreasing appeal to applicants for teaching positions.—(from *United States Daily.*)

TEACHERS' ASSOCIATIONS TAKE OUT GROUP INSURANCE

The news bulletin of the N. E. A. Department of Classroom Teachers has issued a report showing that ten cities of the country have taken out group insurance for the benefit of their members. Reports received indicate that group-insurance plans have been worked out during the past year by the teachers' associations of Birmingham, Ala., Chicago, Ill., Cincinnati, Cleveland, and Dayton, Ohio, Minneapolis, Minn., Norfolk, Va., Pittsburgh, Pa., and Seattle, Wash.

The Birmingham association has appointed a committee to revise its constitution and by-laws for the purpose of bringing about a more democratic form of organization so that the individual teacher may have a better knowledge of its activities, purposes and aspirations.

The Milwaukee association has appointed a committee to study the question of a sabbatical leave for teachers. The association also sponsors each year a lecture course bringing to the city not only representative speakers from this country, but from abroad.

The Akron association had a share in the passage of the five-mill levy last November by furnishing facts which were broadcast over the radio and flashed on the screens of the local theaters. The association has also established a loan fund for teachers to be put into operation as soon as the details for its administration can be worked out.

The Pittsburgh association sponsors a campaign for funds for maintaining the Hannah Martin Home for Convalescent and Retired Teachers of Allegheny county.

PENSION SYSTEMS FOR TEACHERS VARY IN DIFFERENT STATES

The U. S. Department of Labor has compiled a report showing that 21 plans for retirement of teachers and seven city systems independent of the states are in existence in the country. Most of the systems, according to the report of the department, whether of state or city, limit membership to teachers, usually including superintendents and similar officials. New Jersey and Pennsylvania include other employees of the school system, such as janitors and engineers. Maryland has made a complete change, substituting for its earlier partial system, an actuarial reserve plan.

The report shows that the school employees generally share in the management of the retirement systems, but in five systems the employees have won representation on the administrative body. In Rhode Island, the state provides all the pension funds, while two states add nothing to the teachers' contributions.

In 1927, when the study of retirement systems was undertaken by the department, 21 state-wide systems were in effect, and in addition, seven cities having a population of 400,000 and over had retirement systems for their teachers, independent of those in the states. Of the state systems, those of Arizona, Maine, and Nevada did not lend themselves readily to tabulation, and a brief summary of their principal features provides an adequate idea of the fundamental ideas common to all teacher-retirement plans.

The Arizona law, passed in 1912, provides for a noncontributory system under which a teacher is permitted to retire after 25 years of service, on an allowance of $600 a year. The administration of the system is intrusted to the state board of education, and the pensions are to be paid from the school fund of the state.

The Nevada law, passed in 1915, provides for an annual contribution of $9 (later raised to $12) from the teacher, and permits retirement after 30 years of service, 15 of which must have been in the

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state, on an annual allowance of $500. In 1919, this amount was raised to $600. Retirement for disability is permitted after 15 years of service, with a proportionate smaller allowance. The system is administered by the state board of education, and the money for the state's part of the allowance is raised by an ad valorem tax of 3 mills on the $100.

The western states, in June, 1927, reported 24 teachers on the pension roll, 11 being on service and 13 on disability retirement, with average allowances of $584 for service and $389 for disability retirants. The average age of those on service retirement was 55.5 and their average period of service was 30.5 years. For those on disability retirement the corresponding figures were 53 and 20.6 years. The amount paid out in allowances during 1926 was $10,846.

In Maine, a noncontributory system was established in 1913, under which teachers might retire at 60 on pensions ranging from $200 to $300 a year, according to their length of service. In 1923 this system was abolished, except that pensions were confirmed to all to whom they had been granted under its terms, and a new plan was established under which members would contribute 5 per cent of their salaries, while the state would give annually an amount equal to the combined contributions of the teacher and the state. Membership in the system is optional, and so far only seven teachers have elected to come under its terms. Pensions granted under the old system are still being paid, but none of the members of the new scheme have as yet qualified for retirement.

Most of the systems, whether of state or city, limit membership to teachers usually including superintendents and similar employees of the school system—janitors, engineers, and the like. In New York City, the teachers' system covers only the teaching force, but the board of education has established a special system for all its permanent, nonteaching employees except superintendents, who come under the teachers' system.

In the study it was found that the employees of the schools quite generally share in the management, and sometimes theirs is the dominant voice. In five systems they have no representation on the administrative body. In three of these—the state systems of California, Rhode Island, and Virginia—the system is administered by the state board of education; in Washington, D. C., it is in the hands of the commissioners of the District of Columbia, and the system of the board of education of New York City is managed by the board itself. With these exceptions, the employees have, or may have, representation on all the boards of management.

The boards usually consist of certain specified officials of the state, or city, holding their positions ex officio, and of other members, who, according to the particular system, are either appointed by some specified authority or elected by the teachers. In six of the states those who are not ex officio members are appointed by the governor. In three of these—Indiana, Montana, and Wisconsin—the governor has free choice as to whom he will appoint, except that in Indiana, not more than two of the appointees may be members of the teaching staff. Illinois, Michigan, and North Dakota provide that some or all of the governor's appointees must be teachers, either in active service or retired on pension.

The Wisconsin system provides for large representation of the teachers, since it calls for three boards—one each for the public schools, the normal schools, and the university, the members of all of which are elected by their fellows. These act upon claims for retirement from the respective departments, but a right of appeal lies from them to the upper board, composed of two ex officio members and five appointees of the governor, which also handles the funds and investments.

The systems of the remaining nine states all provide that one or more members of the administering body must be elected by the teachers from among their own number.

In two of the city systems, the employees are not represented by elective or appointive members of the administering body. In the other six systems the teachers elect representatives and in three of them—Chicago, Minneapolis, and New Orleans—their representatives form a majority of the board. In New York City and Detroit, the teachers elect three of the seven members, and in Milwaukee four of the nine. In Milwaukee, it is specified that two of the teachers' representatives must be women.

Rhode Island has a noncontributory system, under which the state bears the whole expense, and Michigan and Montana have wholly contributory systems, under which the teachers contribute all, the state paying nothing to the fund. With these exceptions, all the systems call for a division of the cost between employer and employee, the proportion borne by each and the methods of determining the contributions varying widely.

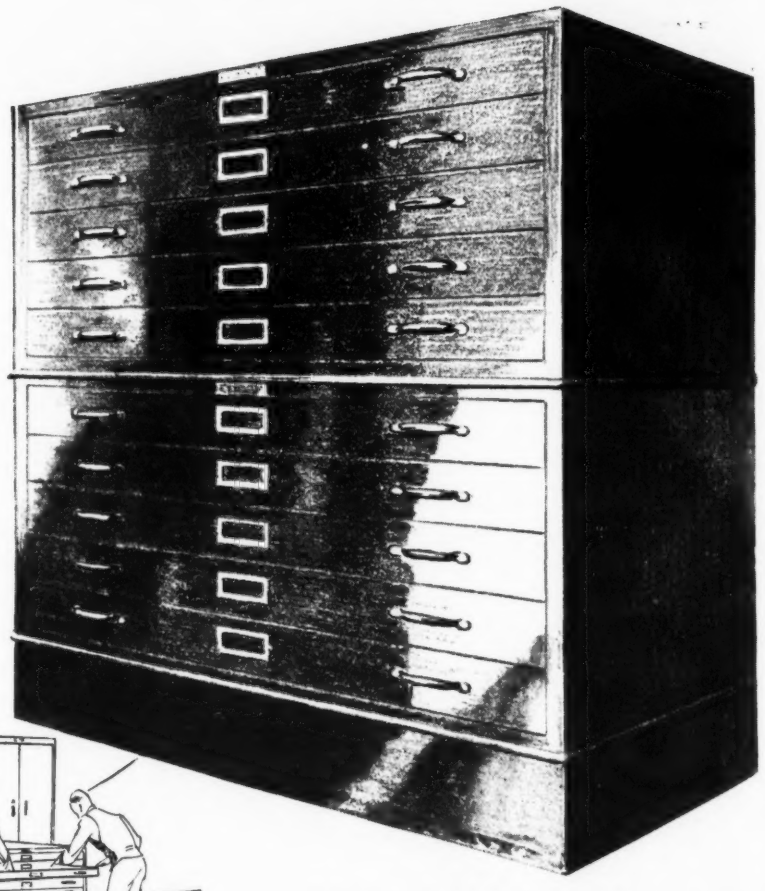
In two states the teachers contribute a flat sum yearly, California requiring $12 per teacher, and Montana assessing each teacher $1 for each month of the year. As the school year varies in length in different parts of the state, the contributions vary accordingly, but it is provided that a teacher must have paid in at least $300 (raised to $600 in 1927), in order to be eligible for a superannuation allowance. Three states modify this plan by requiring a graded flat sum. Illinois calls for $5 annually from those who have taught 10 years or less, $10 a year from those who have taught from 10 to 15 years, and $30 a year from those who have taught over 15 years. After 25 years of teaching the contributions cease.

Minnesota calls for $5 annually for the first 5 years, $10 for the next 5, $20 for the next 10, and $30 for the next 5, making a total of $425 for 25 years of teaching, after which the contributions cease. Those with salaries over $1,500 a year may be required to contribute on a percentage basis, but the annual contribution must not fall below what the flat sum for the corresponding year would be. Indiana has introduced a further modification of the idea by requiring a flat contribution, based on the age at entrance, designed to produce at age of 60 an annuity of $7.50 for each year of service. The range of contribution is from $32.45 for those entering the service at age 18 to $18.04 for those entering at age 40.

Four states require the teachers to contribute a flat percentage of their salaries. In Wisconsin, the rate is 5 per cent, but teachers under 25 years of age are not called upon to contribute. New York and Ohio fix the rate at 4 per cent. Ohio exempts from contribution all salary over $2,000, but places an additional assessment of $1 per annum on all teachers to meet the expenses of administration. Virginia requires a contribution of only 1 per cent of the salary, but provides that if, at the time of retirement, the teacher's contributions have not reached 30 per cent of the average annual salary for the last five years of teaching, a deduction shall be made from the first year's pension to bring the credits up to that amount.

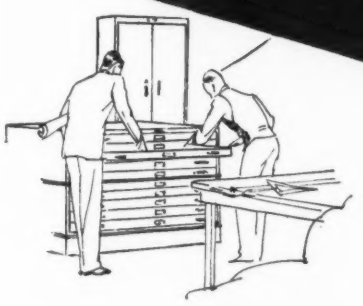
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(Continued from Page 108)

The systems of 3 other states call for a flat percentage, but set limits upon the amounts to be collected. Connecticut, Massachusetts, and Vermont all require 5 per cent of the salary, and all fix the maximum contribution at $100 a year, but Connecticut sets a minimum of $25, Massachusetts of $35, and Vermont of $16 a year.

Two states, Michigan and North Dakota, provide for a graded percentage. Michigan requires 1 per cent of the salary, not to exceed $10 per annum, for the first 5 years; 2 per cent, not to exceed $20, for the next 10 years; and 3 per cent, not to exceed $30, for the next 15 years. The teacher must have contributed at least 100 per cent of the first year's retirement allowance. North Dakota requires a contribution of 1 per cent of the salary, not to exceed $10 annually for the first 10 years, and then 2 per cent, not to exceed $40 a year for 15 years, after which the contributions cease.

In three states, the contribution is a percentage of the salary, based on sex and age at entrance, which will produce, after normal requirements as to age and length of service have been fulfilled, a sum sufficient to purchase a specified annuity.

The city systems show much the same kind of arrangements. Chicago and Milwaukee teachers pay graded flat sums. Chicago requires monthly payments of $1 for the first four years of teaching, of $1.50 for the second four, $2.50 for the third four, and thereafter $5 a month for as long as the teacher continues in service. In Milwaukee, the contribution is $4 per month for the first 10 years of service, $6 for the next 5 years, and $8 a month thereafter. Both cities count 10 months to a school year.

NEW YORK CITY SCHOOL BOARD REDUCES MAXIMUM PAY OF TEACHERS

Teachers' salary schedules, effective January 1 last, were reduced by the New York City board of education on July 11, when it rescinded the super-maximum rates held by the corporation counsel to be null and void because the board proposed to pay such rates only to those teachers who "met the standards to be set by the board of superintendents." The corporation counsel held that the law required that all teachers having rendered the same number of years of satisfactory service would be entitled to the rates and that distinction could not be made.

The changes made in the schedules reduced the maximum pay of lower-grade teachers from $180 to $360; the maximum pay of junior -high-school teachers, $300 to $600; the maximum pay of day high-school teachers, $252. The maximum rates for other groups of teachers were reduced accordingly.

LAW AND LEGISLATION

—An important case affecting the city of Revere and the firm of Ginn & Co., publishers, has been lost by the latter. It seems that the school committee ordered textbooks amounting to $1,226.99, and promised deferred payment because the appropriation for textbooks had been exhausted. When, owing to a doubt about the law, the debt was not paid, the publishers sued for payment. The supreme court of Massachusetts decided that the school committee of Revere was not liable for any sum not included in the aggregated appropriation granted by the city council.

—In Chicago, 112 teachers who were retired with half pay at the age of 70, will receive $225,000 back pay under a recent court ruling. The court holds that they were entitled to full pay.

—The McLewis $10,000 school-bond election called at Orange, Texas, was stopped by an injunction. The proceeds of a former $10,000 bond issue were lost in a bank failure. The present bond issue was intended for the purchase of a school site. The choice of the site was opposed by a fraction of citizens. It contemplated an unlawful division of the school district. Hence, the injunction. The county school board composed of the following: Miss Allie Bland, county superintendent as ex officio member; Dr. J. D. Yates, Mrs. D. C. Bland, C. L. Armstrong, Byron Smith, and J. D. Peveto.

—The board of education of Schoolcraft, Mich., has received an opinion from the attorney general of the state to the effect that a school-board member cannot legally write insurance for the schools or sell bonds to the board. The board at Almont, Mich., has received an opinion to the effect that school boards cannot buy supplies from firms in which a member is financially interested.

—A member of the board of education of Edwardsville, Pa., is a director of a local bank with which the board is doing business. Barney Korn, a citizen has raised the question of legality. The local newspaper ridicules the whole matter, holding that the board members are high-class citizens and above suspicion.

—The attorney general of Illinois has declared that a teacher having been at least for fifteen years in continuous service, may retire and yet enjoy the benefits of the pension act.

—Neither local boards of vocational education nor cities, according to the attorney general of Wisconsin, have power to pledge vocational-school property as collateral for loans with which to build additions to the school.

—In Delaware, delinquent taxpayers are not eligible to school-board service. S. A. Hellen was elected a school trustee at Richardson Park, Dela., last May. President John G. Gauer has ruled that Hellen cannot serve until he will produce tax receipts for the past two years. Hellen claims that he has paid his taxes despite the claims that the records do not prove it.

—Last year the budget of the school board of Battle Creek, Mich., was revised by the board of supervisors by striking out a $207.000 item for a new school. The action was contested in the courts with the result that the school board lost out. The court held that the $207,000 must be submitted to the voters.

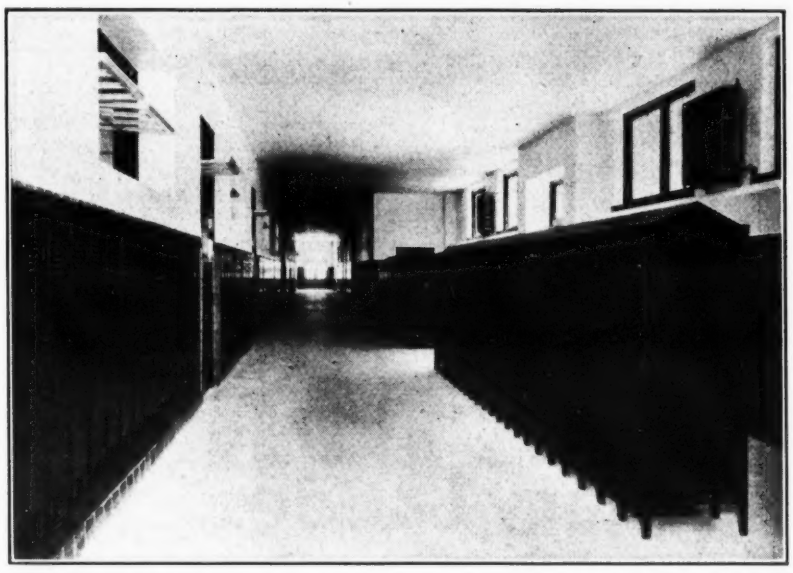
—A group of teachers in New York City have won a large victory in their suit to compel the city to pay claims for injuries sustained in the performance of their duties. The victory, while not yet complete, has reversed the decisions of the lower courts which upheld Comptroller Berry's refusal to pay the claims approved by the board of education. The court of appeals has issued an alternative writ of mandamus to Mr. Timothy D. Poucher, president of the Federation of Teachers' Associations, which undertook the legal fight on behalf of a large number of teachers whose claims had been held up. The claims date back three or four years.

The board of education, following an investigation of each case by the board of superintendents, had acknowledged liability and requested funds to compensate the teachers for expenditures for medical fees or hospital treatment. The comptroller, however, refused to pay, on the ground that no compromise had been attempted by the board of education and that no audit had been made by the school authorities.

The court, in its decision, holds that if there really were no audit, the order for a peremptory writ of mandamus requested by Mr. Poucher, as assignee of the claimants, could not be issued. The federation will at once move to compel payment of the claims. If the federation wins its next move, back claims for a period of years will be paid.

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RULES AND REGULATIONS

—The school board of Peterboro, N. H., has voted to have a treasurer's report mailed each month to the members, and that hereafter no payments on purchases be made unless certified by the superintendent. It has been ruled also that the teachers in all grades must have a normal-school certificate.

—By unanimous action the school board of Spokane, Wash., will permit no dances in the high school. President Turnbull explains that the board's policy of using the school plant for educational purposes only should be adhered to; that teachers should not be burdened with the duty of supervising dances; and that a few dances in the high schools would be the opening wedge for more dances in the high schools, and also for dances in junior high schools and grade schools.

—The school committee of Barrington, Mass., has passed a resolution establishing the policy that hereafter no married women teachers shall be employed. The rule will not affect those already employed.

—The school committee of Westfield, Mass., has amended its rules to the effect that married women teachers will be barred. If a teacher marries during the term of her contract, she automatically terminates her connection with the school.

—The school committe of Medford, Mass., has voted the list of teachers appointed with the proviso that all teachers having able-bodied husbands to support them, be dropped. A member of the committee stated that married women were preventing deserving single women from obtaining positions in the Medford schools.

—A rule submitted by Supt. W. R. Booker, providing that no teacher shall be employed who has not had two years of successful teaching in other school systems, was adopted by the Muskegon, Mich., board of education.

—The board of education of Inglewood, Calif., has ruled that all teachers employed hereafter by that body must reside in the school district. The action of the board was taken owing to the fact that there has been criticism of teachers who live outside of the district and manifest no interest in the community in which they earn their living.

—The board of education of Perth Amboy, N. J., has on resolution offered by President John J. Quinn, voted to discontinue to grant leave of absence to teachers except for the purpose of study at an educational institution.

SCHOOL ADMINISTRATION

—The board of education of St. Louis, Mo., rejected the recommendation of Supt. John J. Maddox for two school principals because these were out-of-town men.

—The school board of Buffalo, N. Y., will exclude nonresident pupils from the high school of that city.

"We are confronted with the problem of overcrowding in our high schools," said Henry F. Jerge, chairman, "and we believe that our own pupils should have the first chance. At the same time, we do not wish to be unfair to nonresident pupils who already have started courses here or who do not have opportunity to take certain courses in their own communities. The regulations provide that pupils will not be accepted for any of the high schools of Buffalo whose parents or duly appointed guardians live outside the city limits, unless they have been previously registered for one term or more, or unless they live in a township in which two or more courses to be taken in Buffalo are not offered. Exception also is made in the cases of nonresident pupils whose parents or guardians pay taxes to Buffalo. They receive a reduction in the annual tuition fee of $160. Tuition fees must be paid in advance.

—The industries of the country, in cooperation with the Division of Simplified Practice of the U. S. Bureau of Standards, have adopted 95 simplifications as a result of the completion of seven recommendations coming before the division during the second quarter of 1928. The report which was prepared by Mr. R. M. Hudson, assistant director in charge of commercial standards of the Bureau, was presented to Dr. George K. Burgess, director of the bureau, and covered the activities for the quarter ending in June, 1928.

—The school board of Ottumwa, Iowa, has created a new office with the appointment of Mr. W. H. Stocker as superintendent of grade-school buildings and property and supervisor of building custodians. The office has been created to provide adequate supervision for the new school improvement work to be undertaken.

—President George J. Ryan of the New York City board of education has appointed a committee to consider the acquirement of a site for the new headquarters building to replace the present thirty-year-old hall of the board of education. The committee will recommend a suitable site, a building layout, and propose ways and means of disposing of the present building and site.

At the present time, it is not known whether the building will be erected in 1929, but the tentative building item of $33,000,000 provides for the erection of the structure. The new project will not be included as a part of the building budget for any single year, inasmuch as it is not connected with the program of providing space for the school children.

The new building is expected to cost $4,000,000, the tentative budget estimate for 1929 containing $2,500,000 for this purpose. The value of the Fifty-ninth Street site, which is at least one and a half million dollars, will be added to the amount set aside in the budget.

—The board of education of Springfield, Ohio, has experienced some difficulties in holding teachers to their contracts. Frank H. Lowe and Fred C. Dodds of the board, suggest that teachers give a bond assuring compliance with contract.

—"I look on educational work as that of a builder," said Thomas W. Gosling, the newly elected superintendent of schools of Akron, Ohio, in a newspaper interview. "Brick by brick the structure goes up. Good work is never finished, and a good job is never done. You add to the building gradually, and each contributes his bit to the completed structure."

—In commenting upon the action of the National Education Association favoring the creation of a Federal department of education, headed by a secretary in the President's cabinet, prompts the Chicago Journal of Commerce to say:

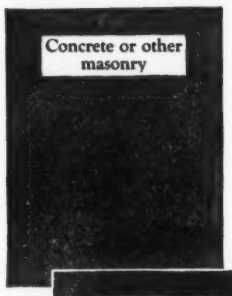
"The National Education Association, of course, cares nothing about the question of bureaucracy, one way or the other. It is interested only in aggrandizing itself and its members. Its members are interested in aggrandizing themselves and their profession. Increased Federal appropriations to magnify the teaching profession, to make the teaching profession an ever bulkier part of government, would be heartily favored by teachers. Humanly enough, they are acting for what they believe to be their own interests. Many of them are impelled mainly by vanity—or call it pride, if you will. They want a Federal department of education merely in order that their profession shall be raised in their own esteem and in the esteem of their neighbors. They minimize or altogether overlook the serious damage which would be inflicted upon the American people by the federalization of the nation's schools."

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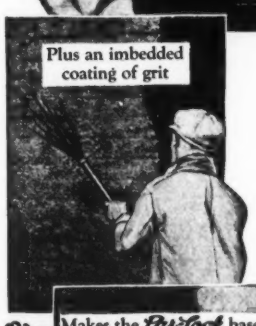




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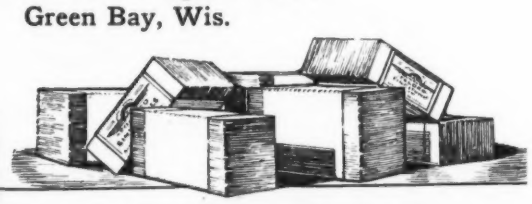
"New towels . . . just feel 'em . . . Gee, it'll be fun to keep clean now . . . . . ."

Children like the soft, pleasant feel of Bay West Towels. That's why they keep their hands and faces cleaner with fewer reminders when these delightful towels are installed. Hundreds of schools use Bay West Towels in every washroom. Try them out in your school at our expense. Mail the coupon for free trial offer.

For high schools and executive offices: *Bay West DUBLTOWLS* — double sheet delivery — double the sheets per case—double the satisfaction. For grade schools and kindergartens: *Bay West SINGLTOWLS* dispensed one sheet at a time, unusually low cost per towel. *Bay West Dispensing Cabinets* — a type for every purpose. Write for descriptive catalog.

Bay West Paper Co.
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Gentlemen: Please send me your De Luxe Dispensing Cabinet (shown above) and several packages of Bay West Towels, both types, for free trial. (Carrying charges prepaid, no obligation involved.)

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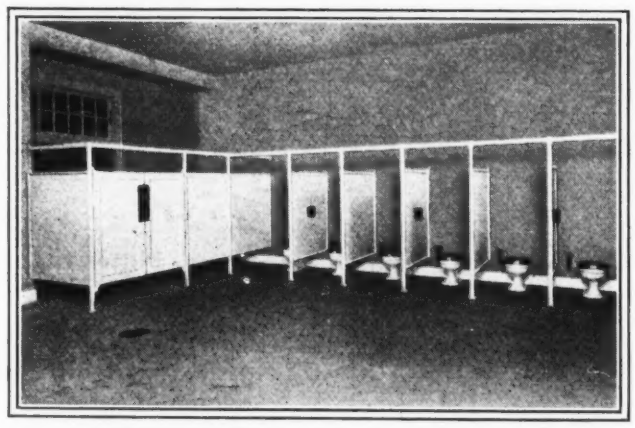
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If YOU Had to Use Them

Nearly time for schools to open. Everything all ready—cleaned, painted, repaired. But how about the toilet rooms in some of your older buildings?

Go down and see them yourself. Decide whether **you** would like to put up with them, day after day, for the next nine months. Are your toilet stall enclosures in keeping with modern developments in school sanitation?

It's not too late for rehabilitation work. Stall enclosures can be changed over the Thanksgiving week-end, or during the Christmas recess. Such improvements are inexpensive, when you use WEISTEEL.



Exclusive features of design eliminate all cracks and crevices; WEISTEEL partitions do not collect dirt. They are easily installed —all fittings are attached at the factory, and adjustable fittings compensate for variations in floor and walls. The maintenance man can install them without trouble.

We'll be glad to develop your rough sketch of requirements, to show exactly what will be needed and how much it will cost. You will be under no obligation. WEISTEEL partitions are worth investigating, because they mean greater comfort and better health for your teachers and children.

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TRADE MARK REGISTERED
COMPARTMENTS

Toilet and Shower Compartments *Dressing Room Partitions* *Hospital Cubicles*

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Portable Bleacher Seats

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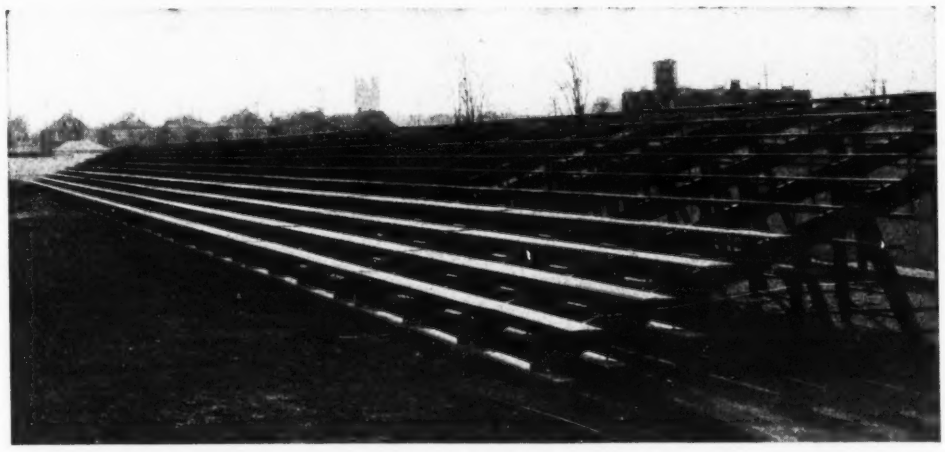
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(Continued from Page 112)

—Pasadena, Calif. Uniforms for girls have been abolished at the new city school formed by the union of Pasadena High School and Junior College, as a result of a decision of the girl students. The use of uniforms was begun eight years ago to prevent trouble and to reduce the cost of clothing. With the establishment of the junior college, the girls decided to return to civilian clothes.

—The West Virginia Department of Education emphasizes the value of accurate and complete records in the following language: "The secretary shall keep a record of the official proceedings of a board of education in a book kept for that purpose. This record should be accurate and complete to be of real value to the board. Such a record will settle many misunderstandings and controversies that may arise relative to the action that was taken at meetings of the board. Inaccurate and incomplete records have been the cause of many legal controversies and have lost cases that rightfully should have been won by district boards of education. Does your secretary have a good book in which to keep a record of the proceedings of your board? If not, enter an order directing him to purchase one. Does he keep a proper record of the minutes of your meetings? If not, you should ask him to do so and if he fails to comply with your request you should employ a new secretary."

—Fond du Lac, Wis. The employment of an assistant to the superintendent as a technical adviser in the field of supervision, the extension of cultural courses, and the abandonment of the mid-year promotion system were recently recommended by the state department of public instruction of Wisconsin.

—Akron, Ohio. The reorganization of the executive staff of the public schools has been recommended to the board of education by Supt. T. W. Gosling in his first report to that body.

Under the plan, the present members of the staff will be retained, but their duties will be reassigned according to a new schedule which is intended to be more scientific and to be capable of a smoother operation of school affairs.

—The department of secondary education of the University of Michigan has recommended that the standards governing the preparation of school superintendents be raised and added to the present standards for accrediting. The new standard which is intended to provide the superintendent's office with capable and especially well-trained men, recommends the adoption of the following rule:

After January 1, 1930, a person elected to the office of superintendent of schools will be expected to possess a degree from a university, a standard college, or a standard teachers' college, representing the completion of requirements for the bachelor's degree; to have completed at least fifteen semester hours in professional training, including courses in advisory and administrative fields, and to have had two or more years of teaching experience, preferably in an accredited school system. The foregoing requirements shall not be construed as applying to a person who has served successfully as superintendent of schools prior to January, 1930, in a system maintaining an accredited high school.

—New York, N. Y. The board of education has been asked to give its approval to the installation of a mural decoration in the main gallery entrance to the auditorium of the Washington Irving High School. The painting is the work of Miss Katherine S. Dreier, and has been approved by the art commission of New York. The painting will be installed under the direction of the superintendent of school buildings, and the work will be done without cost to the board of education.

—The school board of Montclair, N. J., bought two audiometers at $650 to test pupils defective hearing. Superintendent Frank G. Pickell deems it of some importance that teachers be familiarized as to certain physical defects.

—Waltham, Mass. The school board has created the office of supervising engineer. The new official will have charge of the maintenance and operation of the heating and ventilating systems in all the school buildings.

—Providence, R. I. Increases of from $100 to $500 in the annual salary of the superintendent of schools, the deputy superintendent, assistant superintendents, and directors and advisers in the school department have recently been approved by the school board.

In addition, increases of $100 in the annual salaries of 200 teachers have been voted, all of whom have served at least one year at the regular maximum salary. Five teachers who have been paid $100 in addition to their maximum salaries during the past year, were granted a further increase of $100.

The increases in the salaries of school officials are as follows:

Superintendent, from $7,500 to $7,800; deputy superintendent from $6,000 to $6,250; assistant superintendent of secondary schools, from $5,500 to $5,750; assistant superintendent of elementary schools, from $5,500 to $5,750; assistant superintendent of research and guidance, from $5,000 to $5,500; assistant superintendent of vocational education, buildings and grounds, from $5,000 to $5,500; secretary of school committee, from $5,500 to $5,750; truant officer and director of attendance, from $4,300 to $4,500, director of manual arts, from $4,300 to $4,500. The present maximum salaries of $2,700 of supervisors of health and physical education, and supervisors of drawing and home economics, were also raised $100 each.

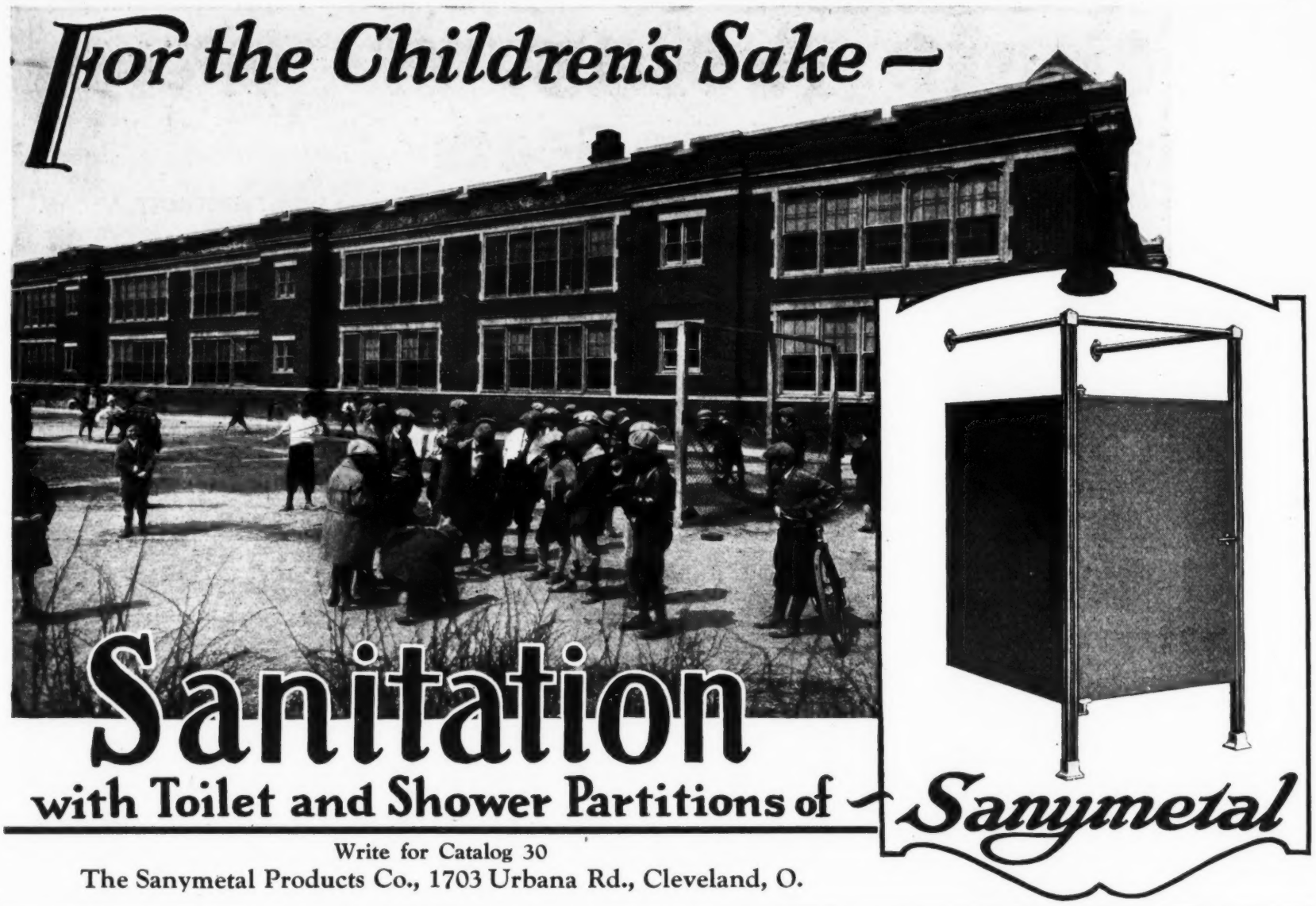
—Spokane, Wash. The school board has denied the requests of pupils and school patrons that dances be permitted in the high schools. The board's action was based on the policy that the school plant should be used for educational purposes and that teachers should not be burdened with the duty of supervising dances.

—Janesville, Wis. The school board recently voted to give no bus service to school children in outlying districts. The action was based on the fact that free bus service is not given in other cities and the state education department disapproves the innovation.

—Mr. H. Wallace Caldwell, president of the Chicago board of education, has announced that civil-service examinations will be conducted for 3,055 janitors, janitresses, firemen, engineers, window washers, and teacher-clerks who have been recently employed by the board on temporary appointment. The action of Mr. Caldwell will put at an end the system of sixty-day appointments for civil-service employees carried out by J. Lewis Coath, former president of the board.

THE MODERN LIBRARY

The increase in library activities in the last forty years is stupendous, and it must be remembered that the new has not so much superseded the old, as been added to it. The manuscripts of the monks, and the incunabula of Gutenberg, need more attention than in their own time, while at the same time the increase in the literate public, and the sea of publications, have accomplished expanding ideals of library service.—June R. Donnelly, Simmons College School of Library Science.



—Ft. Wayne, Ind. The school board has effected a saving of $23,520 a year through the inauguration of a new system of employing janitors and engineers in school buildings. Under the new plan, a chief custodian will be employed in each building, who will employ and pay assistants of his own selection, from a sum appropriated for each building on the basis of the amount of floor space.

Formerly, the school board employed custodians janitors, and engineers, and paid their salaries direct, which created marked differences in janitorial costs, ranging from $7 a thousand square feet a month, to $23 a thousand square feet. Janitors were assigned upon a basis of the number of rooms in a building, which was deemed defective due to widely varying sizes of rooms and corridors.

—At Akron, Ohio, the question as to whether the public library should continue in the control of the city council or be transferred to the school board has been fought out. The school board won.

—The school board-elect of Hot Springs, Ark., has announced that the general public is cordially invited to attend all meetings of that body.

—The board of education of Decorah, Iowa, has decreed that children will be admitted to enter the kindergarten if they are five years old before November 1, 1928.

—The question of the school board's authority to employ legal counsel, has arisen at Hackensack, N. J. County Supt. B. C. Wooster has given it as his opinion that only school boards coming under city charters have the authority to engage legal counsel. The law does not give that authority to smaller communities, but authorizes the county superintendent to give legal advice.

—Middletown, Ind. The three members of the school board recently appeared before the city council to ask for an increase in their salaries from $40 a year to $100 a year. The request which was considered reasonable, was granted. The school board at New Castle also pays a salary of $100 to each of its members.

—Logan, Ohio. The school board has awarded a contract for 700 tons of mine-run coal, at a price of $2.45 per ton. The contractor whose bid was accepted, was the lowest of ten bidders. The highest price was $2.90 per ton.

—The school board of Roanoke, Va., has begun the purchase of equipment for six new buildings in process of completion at the present time. Approximately $13,000 has been expended for chairs, desks, tables, and other kinds of furniture for the buildings.

—The Orleans parish school board of New Orleans, La., expects to save $60,000 a year through the operation of the Long free-schoolbook law, which became effective on August 1 and which will be put into operation during the 1928-29 school year. Under the plan, pupils of private and parochial schools will also be furnished free books. High and normal schools will be required to turn in the books now used at one third of the wholesale price of the books. If this is accomplished, it is estimated that about $30,000 will be required to install the system.

At the present time, all textbooks are furnished free to pupils from the first to the eighth grades, at a cost of $60,000 a year. Students of the high schools and normal schools are required to purchase their books at the retail price from the stores.

—Defects among school children in the public schools of Cleveland, Ohio, can largely be prevented or controlled, according to a recent study. Of 72,961 school children examined, 71.4 per cent in the kindergarten, first, third and fifth grades, had physical defects. Among these, 32,485 had defective teeth, 11,981 were undernourished, 7,326 suffered from goiter, 3,117 had defective vision, 2,155 had defective hearing, and 1,629 were afflicted with heart diseases. The undernourishment found appeared to be due largely to the choice of wrong foods rather than to poverty. The children were not merely underweight, but were suffering from malnutrition. Physical defects among 18,830 children who applied for permits to go to work were found to be larger than among the younger group of children. The only defects which were reduced in percentage were cases of tonsils and adenoids.

—The St. Louis board of education has recently revised the salaries of clerks and stenographers in the supply department. Increases range from $120 to $300 per year. The highest salary, for the second clerk, is to be $2,400 and the lowest salary, for the seventh clerk, is to be $1,140. The chief stenographer is to receive $2,280 and the "fourth" stenographer $1,440. The lunchroom clerk is to receive $1,800.

—A fund is being raised in small subscriptions in Los Angeles, Calif., for the purpose of securing an oil portrait of Superintendent Susan M. Dorsey, to be presented to the schools.

SCHOOL STATISTICS REPORTED BY THE BUREAU OF EDUCATION

—Endowments for all types of schools in the United States in 1926 exceeded $1,000,000, according to a report issued on August 9 by the Bureau of Education of the Department of the Interior.

The Bureau reports that the total valuation of all school property in 1926 was approximately $8,125,085,472 and that the grand total of enrollments in all types of schools was approximately 31,037,736.

The state departments of education reported a total value of public elementary and secondary-school property for 1926 of $4,676,603,539. Private high schools reported $511,544,000. Teacher-training institutions, including endowments, have a total valuation of $202,630,512, and colleges and universities of $2,334,307,421.

In 1926, the states reported 256,104 public-school buildings. A total of 215,439 of these are designated as elementary-school buildings, and 9,538 as high-school buildings. Of the total, 256,104 buildings, the number used in consolidated schools is 16,291, and the number of one-room buildings, is 161,531.

There are approximately 21,700 public high schools, 2,500 private high schools, 125 secondary departments in teacher-training institutions, and 386 preparatory departments of colleges. The teacher-training institutions number 402, of which number 101 are teachers' colleges, 102 state normal schools, 27 city normal schools, 108 county normal schools, and 64 private normal schools.

Enrollments in elementary schools, high schools, normal schools, and in colleges and universities in the outlying parts of the United States amount to 1,496,928. This makes a grand total of enrollments in all types of schools mentioned of 31,037,736.

—New York, N. Y. To keep faith with the teachers who were promised further increases for those now at the maximum rates, the board of education has reserved $3,000,000, including $1,500,000 unexpended this year, in the 1929 budget estimate adopted on August 8. The money is to be distributed in new maximum salaries under a plan to be adopted later.



Never, Never, Never . . .
Will They Stand Unflushed

No one, *no one* can use a Clow Madden Automatic, and let it stand unflushed. Clow Madden Automatics flush themselves . . . more *swiftly* than human hands can operate . . . more *surely* than human minds can function.

With Clow Madden Automatics, sanitation does not wait on the hurried workman, the play-thoughtful child, the heedless transient closet-user.

Swiftly, surely, all residue is whisked away in an engulfing torrent of water. Bad odors, flies, lice, germs, can't exist in Clow Madden Automatics.

A simple valve . . . a closed top tank . . . a bowl with no eddy or backwash hollows . . . these insure a perfect flush each time the seat is used.

Read record No. 102.

Record No. 102 1904 — 24 Clow Automatics installed. 1928 — repair bill after 24 years is $5.00, or less than 1c per closet per year. *Bingham School, Lansing, Michigan.*

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CLOW MADDEN AUTOMATIC

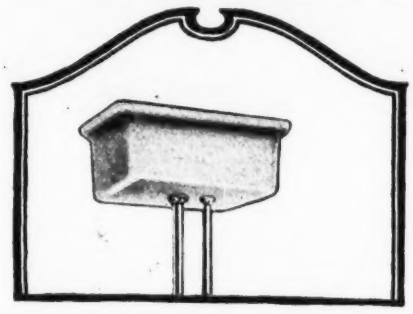
Forty-Eight Styles, Heights and Types to Meet Your Requirements

Will Your Plumbing Be New After 45 Years Service?

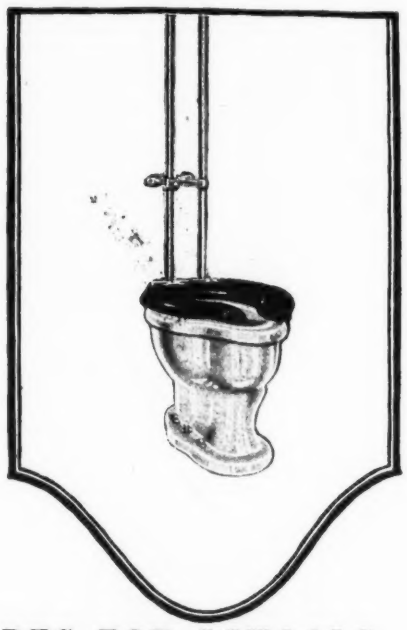
That will depend upon what kind of plumbing fixtures you plan to install. Many "PLUMBING NONCO FIXTURES" have been in service in schools for over 45 years and are still in first class condition. Their remarkable long life has been due to the design and materials used in their construction.

Only the highest quality materials are used in making each "NONCO" fixture. The design is such as to afford the unusual in durability, beauty, dependability, economy, and sanitation. That we have achieved success in our endeavors is attested by the reputation "NONCO" fixtures enjoy in the school field today.

The "NONCO" service experts who have grown with the N. O. Nelson Mfg. Co., are always at your disposal. They will gladly furnish facts and information to help you in any of your plumbing problems.



No. 4784 N, an induced siphon closet with vitreous china, juvenile height, syphon jet bowl with extended front lip. Full-automatic seat-operating valve. Operates perfectly on low water pressure.



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PIONEER MANUFACTURERS OF PLUMBING FIXTURES FOR SCHOOLS

SCHOOL RETRENCHMENT IN FITCHBURG, MASS.

Several New England cities have been imbued in recent months with what may be called "retrenchment fever" which has spread its contagion from Massachusetts' (or Vermont's) favorite son, President Coolidge, down to the legislatures, city councils, and, of course, to the school boards of these states and cities. Perhaps the school systems have felt the retrenchment more severely because they expend, in the cities, from one fourth to one third of the entire appropriations and thus their burden of reduction has been proportionately large.

Why should a school system retrench while modern needs and population is admittedly increasing? From various persons come the varying answers; the world war inflation; the national retrenchment; the closing of cotton textiles in this vicinity; the state tax reductions; the need of more economical municipal administration; local tax reduction; the lessening of burdens of public schools by greater activity in private schools and many other items, which, when all put together and apportioned in the degree of their actual influence all contribute to the actual reason for lower school costs.

In Fitchburg, however, the reason that caused an extensive retrenchment program is the closing of several textile mills and reports of others about to close (which have closed since retrenchment was started). The city has faced a year of full financial activity with an estimated income from taxation far under that of the previous year. The fiscal year of the city began December 1, 1927. The status of affairs was not discovered until late in February as truly critical.

Mayor Joseph A. Lowe, who is chairman of the school board, ex officio, with approval of the city council, ordered flat reductions in every department. The school department was ordered to slash $56,000 from its appropriation of $531,000. In announcing the "cut," Mayor Lowe advised that he had tried to get each department head to retrench voluntarily but found that every time a suggestion was made by him that the department head, knowing his particular department intimately, had arguments to controvert every suggestion. Thus, the "mass" style of budget cutting was adopted.

As soon as the order was received in the school department, Supt. E. W. Robinson sent all principals a letter, of which the following is the substance:

The serious financial crisis that has arrived in municipal affairs has resulted in a reduction by the city council of the sum of $56,000 in the school budget for the current year. The budget as submitted called for the following appropriations:

Administration	$ 17,535
Teaching materials, books, and incidentals	40,045
Teachers' salaries	448,820
Total	$ 506,400

Only seven school months are left between March 5 and December 1, 1928, to affect a saving of $56,000. Obviously, the burden of retrenchment must fall heavily on teachers' salaries.

Three methods of reducing expenses are possible: (1) Shortening the school year; (2) a direct cut in salaries; (3) abolishing certain courses of instruction, eliminating positions, dropping substitutes and practice teachers.

Mr. Robinson closed by asking the principals whether it would be possible to drop or modify such subjects as manual arts, music, drawing, penmanship, domestic arts, etc. Each principal was asked to present his specific recommendations.

Various opinions were brought in and during successive meetings of the school board and the different "planks" of retrenchment were adopted one by one. The result in saving was as follows:

Administration		$ 600
Books and supplies		6,000
Teachers' salaries—		
Eliminating teachers	$ 2,800	
Eliminating supervisors	3,400	
Eliminating practice teachers	1,700	
Americanization and evening	3,200	
Stopping salary schedule	1,300	
		12,400
Continuation schools		3,000
Total		$ 22,000

From experience gained in immediate retrenchment, the following specific economies were affected:

Dropping three high-school substitutes	$ 4,200
Dropping six substitutes, one clerk, one teacher, seven practice teachers, and accepting two resignations in the elementary grades	17,075
Dropping one supervisor, four teachers and one assistant in special subjects	12,025
Discontinuing continuation schools	2,500
Dropping Americanization and evening schools	3,200
Suspending automatic salary increases	
Savings on books and supplies	12,000
Total estimated saving	$ 51,000

At the outset it was frankly stated by the superintendent that the discontinuance of teaching subjects and cuts in the curriculum would result in a reduction of efficiency of the school system. He contended that a 10-per-cent reduction in expenses would result in a 10-per-cent reduction in efficiency.

VALUE OF SCHOOL-BOARD CONVENTIONS

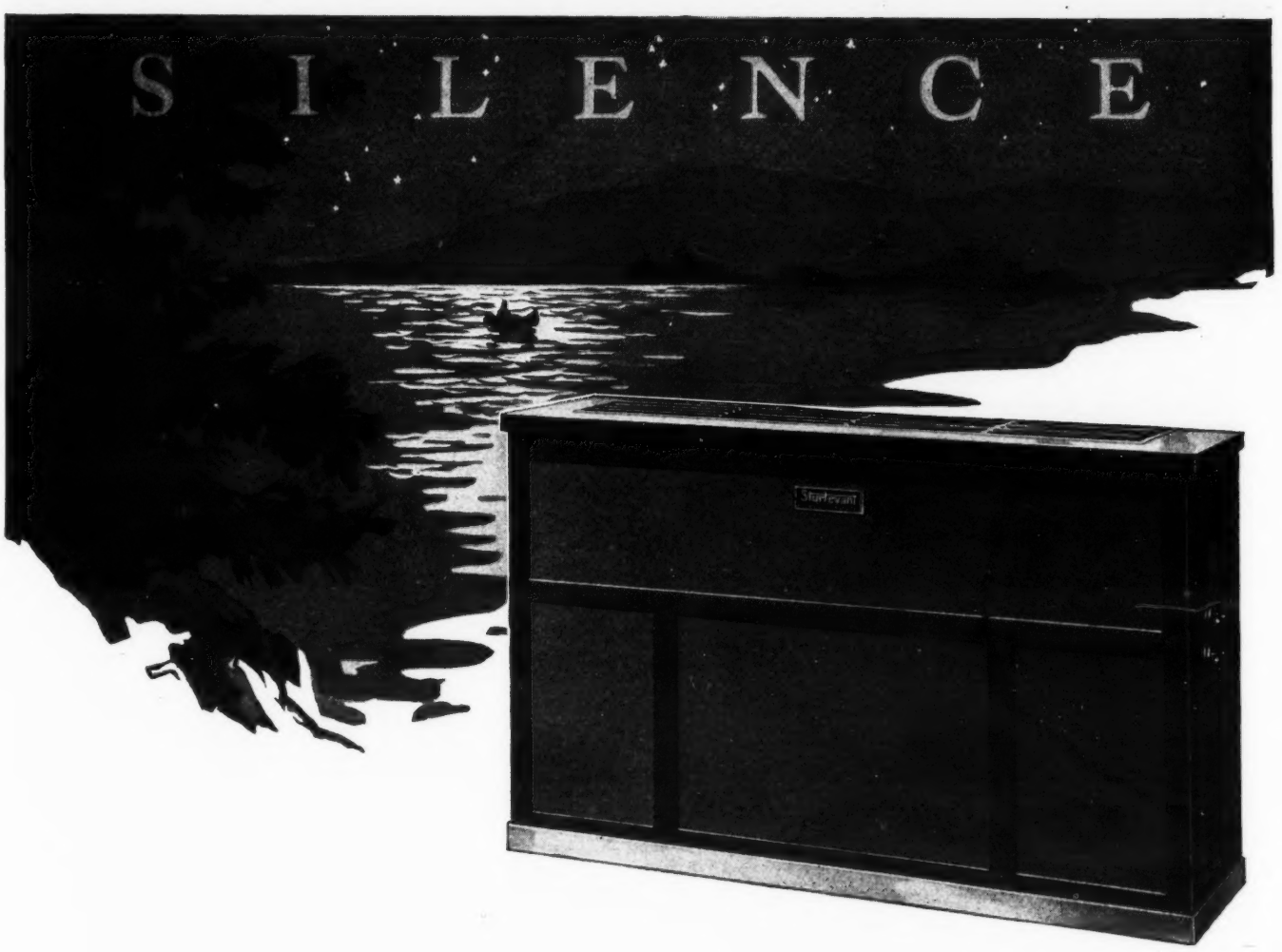
"School-board members derive benefit from conventions in proportion to the time, energy, and interest they devote to them," said Jesse Earl, a Canadian school trustee, recently. "There is abundant evidence from school boards all over Ontario that the sending of delegates to the provincial school-board convention has brought satisfactory returns as an investment.

"I claim that good citizenship requires that every intelligent man and woman devote a certain portion of his or her time, effort and ability to the performance of those things for which no actual remuneration is paid, and which are absolutely essential to the welfare of the state and the community. School-board work comes under this class of duties, and, when undertaken, should be performed without fear, prejudice, or partiality, having in mind at all times only the best interests of the community, whose destiny is literally in their hands.

"If the board is to get adequate returns for its investment, the delegate chosen should be a man who sincerely believes in education, who goes to the convention to get a clearer understanding of the ideals and aims of education, and who will make a point of bringing back a report to his community that will help to keep educational practice in step with educational theory. New light may be shed on some phases of the school regulations. He may acquire a better understanding of the fundamental principles that underlie school administration. Conversation with other trustees as he meets them in the hotel, between sessions, and on the street car, is always a source of mutual helpfulness."

TEACHERS' SALARIES

—The board of education of Waltham, Mass., increased the salaries of 84 teachers in spite of the fact that the board of aldermen refused to appropriate the money for the purpose. The city solicitor informed the board that it had the power to make increase, while Supt. U. G. Wheeler expressed the belief that the increase could be met by present funds.



Built to be more than "quiet"

ENGINEERS and architects expressed a need for a unit ventilator that would be more than "quiet" in operation—a unit ventilator which they could install, confident that it would run so silently that the occupants of a schoolroom, church or office would be unable to detect its operation.

Sturtevant Engineers set out to build such a unit ventilator. In the Sturtevant Research Laboratories, where ventilating equipment has been evolved to meet the demands of the greatest projects in air engineering, the work was begun. Designs were made—revised—made again. Countless experiments were conducted. Special motors and fans were developed. Finally, the "Silent" Sturtevant Unit Ventilator was produced.

As many installations of the "Silent" Sturtevant have already been made, the nearest Sturtevant representative will gladly take you to a local installation where you can observe this equipment in operation. You will then know why it meets the most exacting requirements for quietness and efficiency.

Bulletin 344-A explains the equipment in detail. Let us send you a copy.

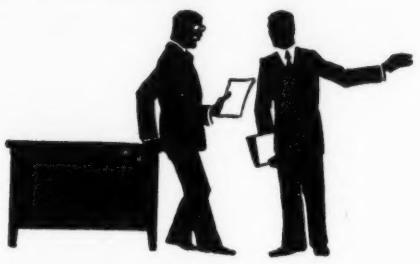
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Sturtevant REG. U.S. PAT. OFF. *the Silent Unit Ventilator*

Your routine need not be affected



If you repair *the Sonneborn way*

EVEN if vacation time is over, you need not defer school repairs on which Sonneborn Products are used. The work need not hold up your regular activities in the slightest degree.

If the concrete floors in your building are dusty, worn or crumbling, harden them *over night* with Lapidolith. This liquid compound goes on a floor as easily as water, and it hardens over night. Your janitor or any workman can apply it with a long-handled brush. No skill or experience is required. Lapidolith, over night, will convert a floor, dangerous to health and costly in upkeep, to one that is granite-hard for years. You can make this improvement at any time.

The same is true with your wood floors. Another Sonneborn product—Lignophol—will quickly give you smooth, dustless wood floors that last for years. Just as easy to apply as Lapidolith. Keeps wood floors from splintering, rotting or drying out. Don't waste time and money with shellac or varnish. Both wear off. Lignophol alone remains and protects.

Perhaps your hallways or your auditorium need paint. Cemcoat stays white after other paints turn yellow. It goes on plaster, concrete, brick or wood. Easy to apply. Dries quickly.

Or if your classrooms need toning up, use Sonotint, a paint specially made for school rooms. Has no poisonous ingredients. Can be washed over endlessly. Has no lustre to affect the student's eyes.

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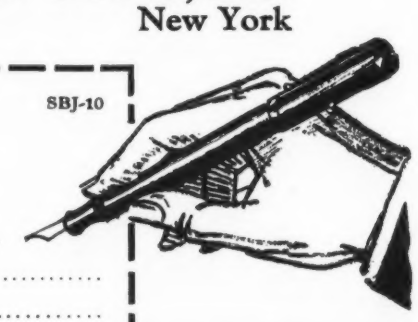
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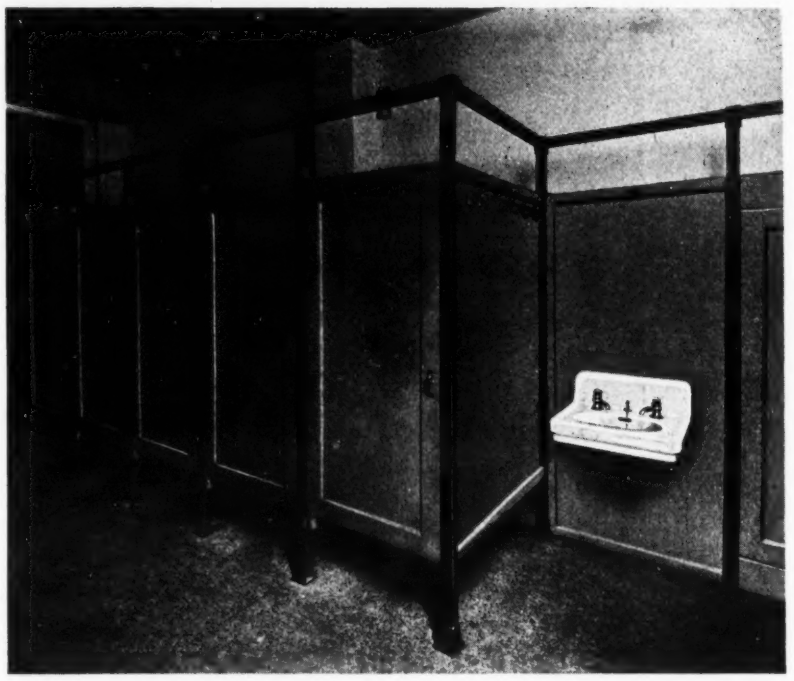
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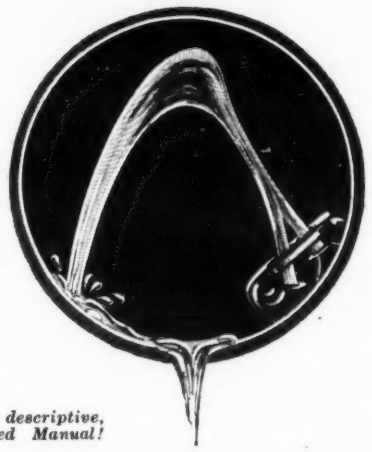


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WASHINGTON CORRESPONDENCE

WASHINGTON CORRESPONDENCE

By A. C. Monahan, Formerly U. S. Bureau of Education

Commissioner of Education John J. Tigert

The retirement of Dr. John J. Tigert, on September 1, as United States Commissioner of Education, to accept the presidency of the University of Florida, closes a seven-year period of service which has been marked by steady progress. First, it should be said that the bureau under Dr. Tigert has secured a standing and recognition among government offices and officials that it has previously never had. It is well housed in the Interior Department building in a suite of rooms adjacent to the office of the secretary of the department. It has ample space for its work, well located and well arranged, and its location is such that in department conferences the commissioner of education cannot be overlooked.

The appropriations for the bureau for the first and last years of Dr. Tigert's administration are as follows:

	1921	1929
General work of Washington office..	$247,960	$320,300
Education of natives in Alaska	275,000	486,500
Medical relief of natives in Alaska..	90,000	160,000
Reindeer work in Alaska.....	6,400	19,500
Total	$619,360	$986,300

These figures do not include janitor service, messenger service, heat, light, telephones, etc., nor do they include the outlay for printing. All of these items are met from department funds, not bureau appropriations.

The Bureau of Education was reorganized by Dr. Tigert into nine definite divisions, with a clear definition of work for each; Higher education, city schools, rural schools, physical education and school hygiene, service, statistical, editorial, library, and Alaska divisions. The statistical division, in particular, was completely reorganized and enlarged. Statistics had been gathered previously by questionaries only. Now, in addition to questionaries, four field workers visit institutions and organizations delinquent in the matter of making statistical reports, and get the information desired. This has made the bureau's data more accurate than ever before and available to the public with much less delay. In fact, in printing, statistical reports are given the right of way over other publications.

Dr. John J. Tigert, commissioner of the U. S. Bureau of Education, has announced his resignation, to take effect September 1. Dr. Tigert, who has been elected president of the University of Florida, assumes his new duties with the opening of the fall term.

Dr. Tigert was graduated from Webb School in 1900 and entered Vanderbilt University. In 1904 he was elected as the first Rhodes scholar from Tennessee.



DR. JOHN J. TIGERT
President-elect of the University of Florida.

From 1907 to 1909, Dr. Tigert held the chair of philosophy at Central College, Fayette, Mo. From there he went to the presidency of the Kentucky Wesleyan College at Winchester. In 1911 Dr. Tigert accepted the position of professor of philosophy and psychology in the University of Kentucky. In 1917 the department was divided and Dr. Tigert took charge of the department of psychology, which he continued to occupy until his appointment as commissioner of education in June, 1921.

Dr. Tigert holds the honorary degree of doctor of laws, conferred upon him by the University of Kentucky.

In accepting the office of president of a state university, Dr. Tigert recognizes the opportunity afforded to get back into active administrative work, and one which he could hardly afford to disregard.

Meeting of Chief State School Officers

The chief state school officers, organized as the National Council of State Superintendents and Commissioners of Education, will meet in Washington, D. C., on December 11 and 12, 1928, at the U. S. Bureau of Education. This meeting was voted by the council at the Boston meeting in February. It is to be held primarily for the purpose of consulting with the bureau relative to cooperative work. The topics of discussion indicate the cooperation desired.

Three main topics have been selected by the superintendents and commissioners on which they want to get assistance from the Federal government. One is "Educational Statistics" which, of course, calls for cooperative action that they may be interchangeable. Another is "Uniform Reports" which would make the work of one state readily understandable by the representatives of another. A further study will be "How the United States Bureau of Education Can Best Serve as a Clearing House for State Departments of Education."

The officers of the council are the three following state superintendents of public instruction: A. T. Allen of North Carolina, Chairman; Francis G. Blair of Illinois, vice-chairman; and John A. H. Keith of Pennsylvania, secretary.

The council is an outgrowth of earlier conferences of chief state school officers called by the commissioners of education during the latter part of Dr. Brown's administration and early in Dr. Claxton's

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term of office. After the first few conferences, it elected its own officers and held meetings regularly at the time and place of the meetings of the Department of Superintendence of the N. E. A.

Statistical Survey of Education for 1925-26

A summary of educational statistics for the school year 1925-26 is included in a recent report of the Bureau of Education entitled as above. It is a summary of data included in eight bulletins published in the past year, with statistics of various parts of the educational field, and of several now being printed, on nurse-training schools, schools for the deaf and blind, and other special schools. The eight published are:

State School Systems, Bureau of Education Bulletin 1927, No. 39.

City School Systems, Bureau of Education Bulletin 1927, No. 32.

Public High Schools, Bureau of Education Bulletin 1927, No. 33.

Private High Schools, Bureau of Education Bulletin 1927, No. 31

Teachers' Colleges and Normal Schools, Bureau of Education Bulletin 1927, No. 30.

Universities, Colleges, and Professional Schools, Bureau of Education Bulletin 1927, No. 40.

Private Commercial and Business Schools, Bureau of Education Bulletin 1926, No. 14.

Schools for Feeble-Minded and Subnormal Children, Bureau of Education Bulletin 1928, No. 5.

Never before in the recent history of the bureau have complete school statistics for any year been made available with so little delay. The speeding up in this matter is due to the better organization of the statistical division of the bureau, and the fact that it has now four field workers to help collect the data. The bureau, through its direct work with proper state and local authorities, and through the work of these field men is securing a much better cooperation from them than ever before, with the result of not only earlier reports but with more accuracy in the figures included.

New High School for Washington, D. C.

The new McKinley High School, replacing the old school which for many years has been known as the McKinley Technical High School, is now complete and ready for students at the opening of the school year. It is the largest and finest school building in the district, representing a total cost of $3,175,000. Of this amount, the building itself cost $2,325,000, the furniture and equipment, $450,000. The land for the entire plant cost $225,000.

The McKinley High School has a complete theater with a seating capacity of 1,800; five study halls with seating capacities ranging from 66 to 166; two music rooms; a library; a 50-ft. rifle range; a complete five-room apartment for practical study in the domestic-science department; a large cafeteria with adjoining open-air courts and a spacious, modernly equipped gymnasium.

In addition to these and regular recitation rooms, the building contains innumerable small rooms which are to house the special students' activities. Others are to be equipped as hospital and rest-rooms. Besides these special rooms, the building contains 37 recitation rooms.

The floor plan of the building is L shaped, the two wings, each 400 ft. long, meeting at right angles. The auditorium or theater is situated in the area between the spreading wings, while the main entrance is located within the grounds in the face of the auditorium wing.

The gymnasium, housed actually in a separate building, is 180 ft. long and 95 ft. wide.

Increased Salaries in the Federal Bureau of Education

The "Welsh Bill" which passed Congress shortly before adjournment provides increased salaries throughout the Bureau of Education, except that of the commissioner himself. The increases vary from $60 per year to $400. Two specialists now receive $5,800 per year, and two $5,600 per year. There are nine specialists in so-called Grade 5, receiving $4,600 to $4,800 per year; seven in Grade 3, receiving $3,200 or $3,300; seven in Grade 2, at $2,600 to $2,900; and one at $2,100.

The chief clerk, who is also acting commissioner whenever the commissioner is away from Washington, receives $4,800, and the chief editor, $3,500. In addition, there are in the Washington office a total of 58 men and women in clerical work of all sorts, including stenographers, typists, statistical clerks, mail clerks, library assistants, etc. Salaries for these 58 vary from $1,380 to $2,800 per year; 20 of them are in Grade 3, at $1,620 to $1,860 per year; 29 are in Grades 4, 5, and 6; the other 12 in lower grades.

The total amount of money necessary to cover these increases is $18,460. The average increase in salary is, therefore, close to $200 per year for each employee of the bureau.

United States Government Specification for Sand-Lime Brick

A specification for sand-lime brick based upon data developed at the Bureau has been issued by the Federal Specifications Board and published as Circular No. 347 of the U. S. Bureau of Standards.

The specification classifies sand-lime brick into three grades, namely; hard, medium, and soft, according to their absorption and transverse strength. The absorption is determined from the results obtained on immersion of the sample in water, after which the water is brought to a boil and the boiling continued for five hours. The transverse strength requirement is based upon the breaking load with a 7-in. span.

The size of sand-lime brick acceptable under the specification must be 2¼ by 3¾ by 8 in., with permissible variations of ⅛ in. in length. Not more than five per cent of the bricks delivered may be broken, and at the completion of the absorption test the bricks comprising the sample must show no evidence of a tendency to disintegrate.

Copies of the specification may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., at 5 cents each.

Standards and Specifications in the Wood-Using Industries

This is one of the newest of the specifications of the bureau, and is an attempt to include the substance of all standards and specifications in the wood-using industries formulated by the lumber manufacturers' associations and other trade associations having national recognition; the national technical societies, including those dealing with lumber and manufacturers thereof, paper and paper products; and other organizations which speak for industry or with the authority of the Federal government as a whole.

The present compilation represents the beginning of the other part previously referred to. It is the first of a series of publications dealing with standards and specifications in various industries to be issued as rapidly as conditions permit. In it use has been made of the decimal system of classification of paper and wood employed in the National Directory of Commodity Specifications. Under the proper classification numerals have been listed certain important groups of commodities for which there might well be, but are not as yet, specifications that can be referred to as nationally recognized. The cost of the book is $1.50, and copies are obtained from the Government Printing Office.

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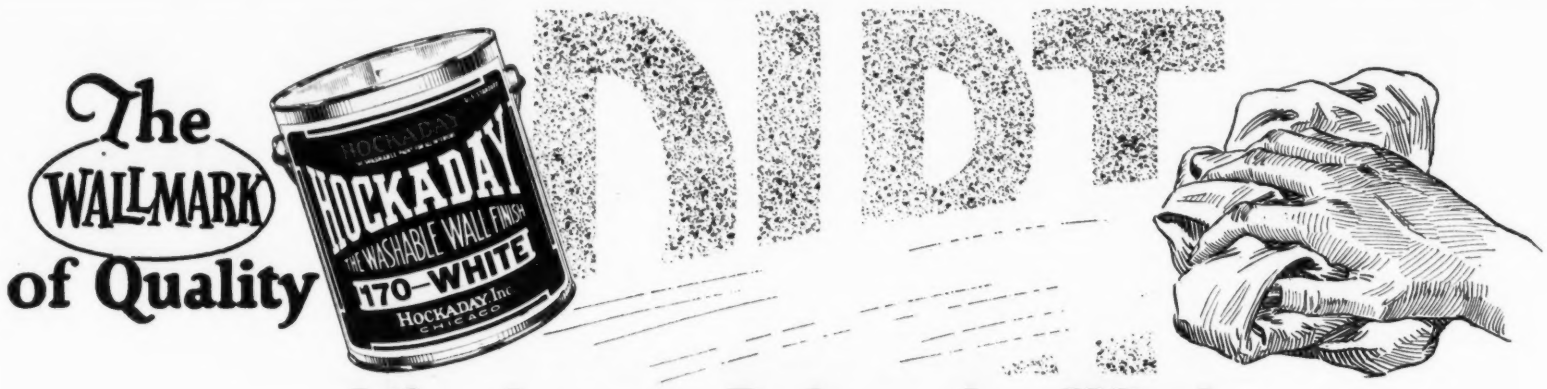
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CHICAGO CORRESPONDENCE

Upon recommendation of Supt. William J. Bogan, the Chicago school board made the most drastic "shake-up" of high-up officials in the educational department ever known. Powerful officials drawing salaries of $10,000 a year were transferred to less important positions and newcomers were named in their stead. On August 8, the board elected 36 persons to major rank, at a yearly salary totaling $205,000.

At the close of a long-drawn-out regular meeting of the board, marked with the usual routine, Mr. Bogan arose and announced to Mr. H. Wallace Caldwell, president of the board, that he had some recommendations to make and would like to read them. Mr. Caldwell asked him to come to the platform. Then, in a room where both gallery and trustees waited in tense, hushed silence, the new superindendent addressed the president:

"Mr. President, when I was being congratulated on my election as superintendent a few weeks ago, you assured me that there would be no politics in the running of the schools, and that I would have a free hand. Since then, every member of the board has individually assured me that I would be free in making my recommendations for appointment. I want to congratulate you on the stand you have taken. Therefore, I shall be wholly responsible for my recommendations here today—someone might have done better, but I have done my best. None of the selections has been based on politics, religion, fraternalism, or favoritism, but everyone has been chosen for merit and fitness for the positions to which they are assigned. If, in a year or two, my judgment is not vindicated, I will not be able to offer the excuse that a political board forced it on me."

Newspaper men who had ventured to guess who would be named for the board of superintendents discovered they had a batting average of .00. Peter A. Mortensen, former superintendent of schools, was returned to the school system as principal of an elementary school. Ernest E. Cole, formerly first assistant superintendent, and a prominent figure in the recent McAndrew trial, was not promoted from the elementary principalship which he now holds. Following is an enumeration of the new positions and personnel:

1. *Chicago Normal College:* (Salary, $8,500 per year.)

Mr. Butler Laughlin, principal of Parker Senior High School, was chosen to succeed Dr. William B. Owen (deceased) as president.

2. *Assistant Superintendents:* (Salary, $10,000 per year.)

Benjamin F. Buck, principal of Senn Senior High School, was named for the vacancy caused by Mr. Bogan's elevation to the superintendency. Mr. Buck will be in charge of junior and senior high schools, continuation schools, etc.

Miss Isabella Dolton, principal of the Farragut Junior High School supplanted Mr. Morgan G. Hogge as assistant superintendent in charge of evening schools, Americanization classes, community centers, summer-vacation schools, etc.

Mr. Charles J. Lunak, principal of Hirsch Junior High School, supplanted Mr. Charles D. Lowry, and assumes responsibility for the annual school budget, buildings and repairs, research, etc.

Mr. James E. McDade, principal of the Wentworth Elementary School, supplanted Miss Elizabeth Murphy, and will be in charge of truancy, defective children, special subjects, etc.

Miss Rose A. Pesta, principal of the West Pullman School, succeeds Clarence E. DeButts, is placed in charge of the assignment of teachers and principals, the listing of textbooks and supplies, rules, etc.

The incumbents of these positions were transferred to district superintendencies, except one who was given a senior-high-school principalship. Mr. Bogan stated that there was no reflection on these folks but that "we are living in a new world, and we must have people with vision to bring into Chicago the best of the latest developments in education."

3. *District Superintendents:* (Salary, $6,500 per year.)

Miss Jane A. Neil, principal of the Spaulding School for Crippled Children, was placed in charge of the city's schools for cripples.

Miss Lillian Tobin, principal of the Mozart Elementary School.

Mr. James E. Bache, principal of the continuation schools.

4. *Special Assistant to the Superintendent:* (Salary $5,720.)

Mr. Fred J. Lane, principal of the Jenner Elementary School.

5. *Heads of Bureaus:* (Salary, $6,000 per year.)

Mr. J. Lewis Browne, organist, choirmaster and musical composer, named director of music.

Miss Florence Swain, named director of household arts.

Mr. Eston V. Tubbs, principal of the Chase Elementary School, named director of curriculum.

Mr. Don C. Rogers, principal of the Smyth Elementary School, named director of the bureau of building survey.

Several assistants to directors were selected: Mrs. Rose L. Gannon, assistant director of music; Nobel Cain, supervisor of vocal music; Hobart Summers, supervisor of orchestra music; Mrs. Lillian Willoughby, assistant supervisor of classroom instrumental music; Louis Condy, supervisor of military band music. An assistant director of the bureau of buildings survey was authorized.

6. *Senior-High-School Principalships:* (Salary ranges from $4,300 to $5,700.)

Thomas E. Johnson, principal of the Haugen Elementary School, to Medill High School.

7. *Junior-High-School Principalships:* (Salary ranges from $4,600 to $5,400.)

William T. McCoy, from principalship of the Earle Elementary School to that of the Curtis Junior High School.

Mrs. Bertha Armbruster from principal of the Hilton elementary to the Farragut junior high.

Mr. Edward Wildeman from principal of the Shields elementary to the Kelly junior high.

Mr. Daniel J. Beeby, from principal of the Oglesby elementary to the Hirsch junior high.

8. *Elementary Principalships:* (Salary ranges from $3,000 to $4,800.)

Following are the newly elected principals and their schools: Laurence G. Collins to the Hamline School; Mina S. Rogers to the Motley; Harold H. Postel to the Drake; Ada M. Andrews to the Plamondon; Josephine K. Liska to the Haven; Howard Bradley Smith to the Greene; Earl L. Koehler to the Walsh; and Mary I. Reynolds to the Onahan. Nellie F. Ryan was elected principal of a continuation school.

Supt. William J. Bogan has undertaken to bring the public into partnership with the schools through the creation of two advisory bodies. He has asked that a committee of fifty representatives of leading civic organizations study school problems and be prepared to advise him in the administration of them. Under the leadership of the president of the Women's City Club, a convention or "institute" lasting three days is to be held in September.

An advisory committee of experts is also asked to cooperate in the new city school administration, under a plan initiated jointly by Supt. Bogan and President Caldwell. Some of the most distinguished educators in the Chicago area have been invited to make up this committee, namely: Walter Dill Scott, president of Northwestern University; Frederick Woodward, acting president of the University of Chicago; David H. Kinley, president of the University of Illinois; Henry M. Raymond, Dean of Armour Institute of Technology; Thomas S. Levan, president of DePaul University; George N. Carmen, president of Lewis Institute; and Dr. Robert Kelly, president of Loyola University.

PUBLISH BOOK IN MOVIES

—A tie-up of particular interest to users of educational motion pictures has been announced by the educational department of the Pathe Exchange. Mrs. Madeline Brandesis, the producer of the motion pictures "The Little Indian Weaver," and other similar pictures to be released by the Pathe Company, has prepared a series of books as supplementary material to accompany the educational films.

An arrangement has been perfected under which the A. Flanagan Company of Chicago will handle the books for the trade, and Grosset & Dunlap of New York, the books for the bookstores and the Pathe educational department. The motion pictures will be listed on the title pages of the books, while the books will be listed in the title leaders of the films and the teachers' aid pamphlets used in connection with the pictures.

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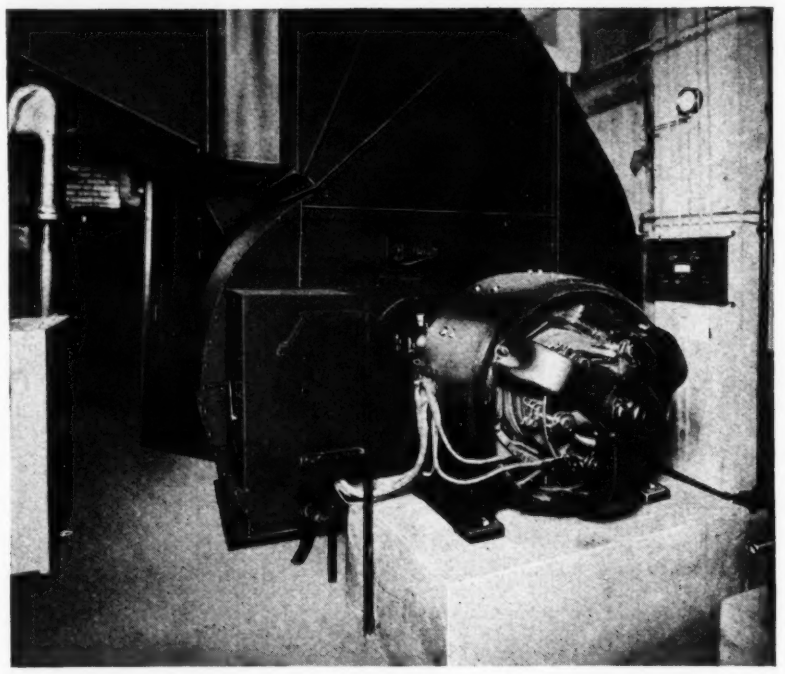


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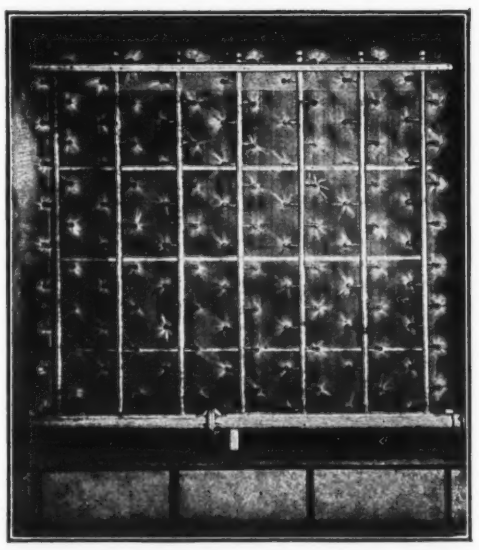


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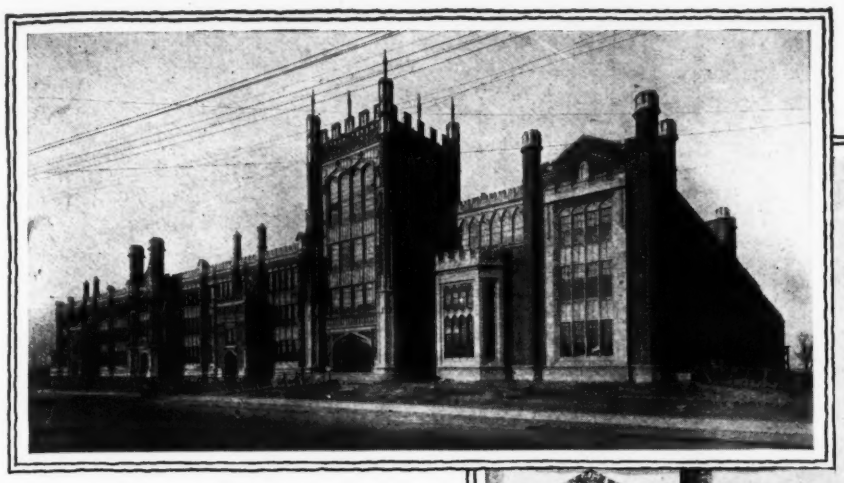
Write us for further particulars.



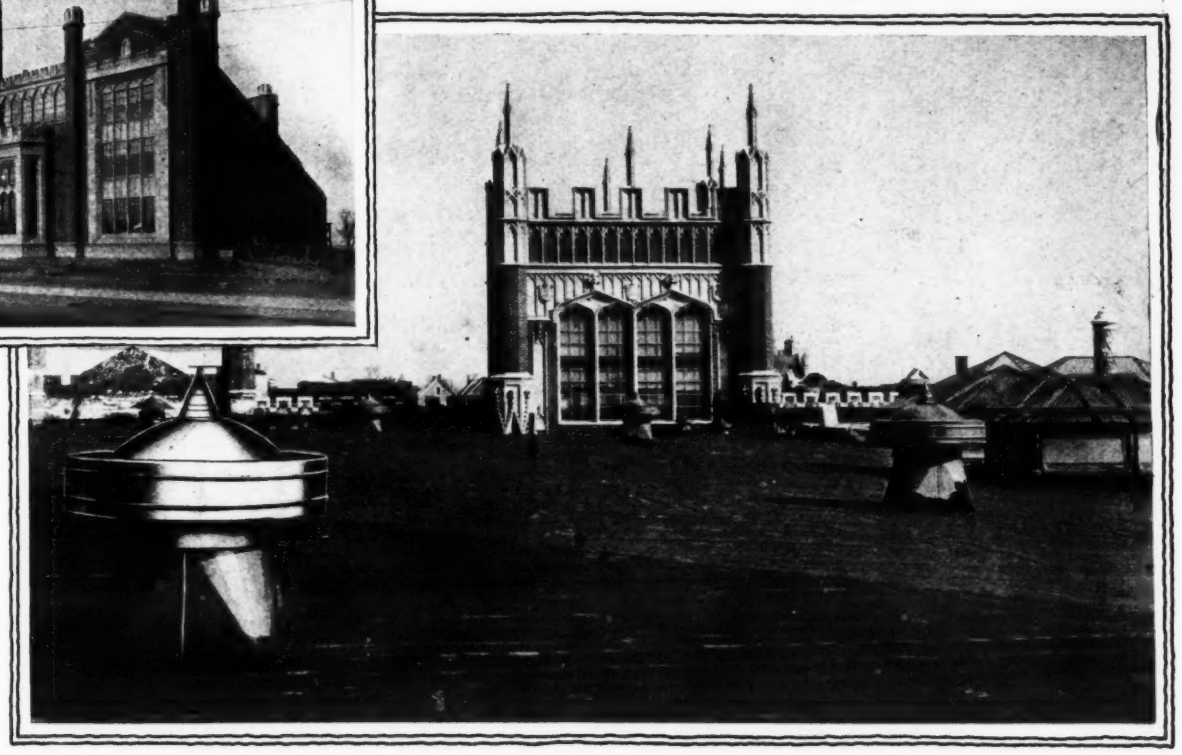
Interior of a "Buffalo" Carrier Air Washer showing sprays in action. Carrier Washers are very easily operated, temperature control is perfect, regulation of humidity is simple, the life of the equipment is very long, and the operating efficiency is unusually high.

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Ventilation for School Buildings

SO efficient have "GLOBES" proved themselves to be that many architects look upon them as the standard ventilation for schools. Thousands of successful school installations prove this to be true.

The ventilators on the Junior High School are sturdily constructed of heavy weight copper, making them practically everlasting. They are absolutely storm-proof and trouble-proof.

There is no upkeep expense and there are no moving parts to get out of order or to require lubrication.

"GLOBE" Ventilators furnish efficient ventilation for schools of all sizes, from the smallest frame portable school to the largest permanent building, such as pictured here. Your inquiries relative to the ventilation of any type of school will receive a prompt reply.

GLOBE VENTILATOR COMPANY
DEPARTMENT J TROY, NEW YORK

NEW YORK CITY SCHOOL BOARD PASSES ITS LARGEST BUDGET

The board of education of New York City, on August 8, adopted a budget of $131,700,000 for the school year 1928-29. The budget is $7,153,453 more than was available last year and represents 30 per cent of the total city budget, or three times more than the amount spent for the police department alone. Of the total amount, $130,000,000 is for educational purposes, which is $38,000,000 more than the amount allotted for police, fire, and street cleaning departments of the city.

The present budget does not include approximatly $27,198,505 expended by other departments, which under an amendment to the state education law, must be shown in the budget estimate. The items include debt service, amounting to $19,695,869; teachers' retirement fund, $5,674,893; department of health, $667,749; and expenditures of the department of water, gas, and electricity for heat, light, and power, amounting to approximately $1,159,993. Included in the budget is $33,000,000 for new sites and school buildings.

The budget shows a total tax estimate of $131,100,680, as compared with $124,547,227, which was available last year. The largest single item of increase is the $3,000,000 of state-aid money, reserved for the maximum salaries to teachers for the supermaximum rates nullified by the recent ruling of the corporation counsel. A total of $1,500,000 remains unexpended this year.

The report of the finance committee to the school board shows that the city school system is costing approximately $192,464,611 a year. Of the total, $165,266,105 represents the budget estimate. Complying with the state law, the board has listed the expenditures for public purposes other than the board of education, for the school year August 1, 1927, to July 31, 1928. These are as follows:

Debt service	$19,695,869
Annual installment to teachers' retirement service	5,674,893
Expenditures of health department	667,749
Estimated expenditures of department of water works	1,159,993
Total	$27,198,204

It is expected that most of the budget increase will be required for the day-school system. Provision has been made for 391 high-school teachers for an anticipated enrollment increase of some 9,500 pupils and for rounding out the teaching staffs of four new high schools to be opened during the year. The day elementary schools will be given 317 additional teaching and supervising positions, of which 150 will be used for increased register, 100 for the reduction of oversize classes, and 62 for fifteen new schools to be opened. The junior high schools will be given 44 more teachers to take care of an expected increase of 1,500 pupils.

In addition to the increase in the number of regular class-teaching positions, the budget committee has also made provision for meeting the needs of children demanding special types of instruction.

LARGE STOCKS OF SCHOOL SUPPLIES

Occasionally someone calls attention to the school-supply department of a modern school system and points out the importance of such a department well organized and well stocked. The Herald of Quincy, Ill., takes occasion to describe in a long article the purchase and distribution of school supplies for that city as conducted by Charles E. Lane, business manager.

"The variety of needs of a large school system has these days would prove astonishing to anyone not acquainted with the facts," says the newspaper. "At a recent meeting of the school board, Mr. Lane presented his budget of supplies, ten closely written typed pages. In all there were more than 500 different items. He buys everything from a tubular boiler to a pound of corn starch. One order may be for enough lumber to build a house that will be worked up in the manual-training classes, or a pound of egg albumen for the biological classes.

"The list of supplies purchased for the chemistry department of the high school looks imposing enough for a drug store, and no carpenter in Quniey buys as many supplies as Mr. Lane. More money is spent a year on tools and lumber in the manual-training rooms of both grade and high schools than in any other course of study."

The newspaper then enumerates the odd things that are purchased such as insect pins, anatomical models and other biological utilities. Then comes the long list of regular supplies, including 600 reams of newsprint, 80 cases of paper towels, pencil sharpeners, dustless crayons, crayon erasers, and the like.

"Hundreds of gallons of paint are purchased each year to be used on the school buildings and a large amount of paint and varnish is used in the manual-training work. The domestic-science classes call for a variety of supplies used in cooking. The athletic department also gets its share of the various articles purchased. All supplies janitors use in keeping the buildings clean are bought by Mr. Lane and in the course of a year amount to a considerable sum.

"All supplies are purchased through competitive bidding. The school board is as careful as any other business firm in the effort to get the most for the money.

"So far as is practicable, all articles used in the school system are bought in Quincy from local dealers. There are certain supplies needed in biology, art, and chemistry that may have to be bought outside the city, but wherever a local dealer can supply the goods of quality at the low price he gets the order.

"While Mr. Lane attends to the buying, every dollar he spends is authorized by the auditing and supplies committee. All payments are made by vouchers and the records are on file and are open to every citizen who may be interested in seeing them.

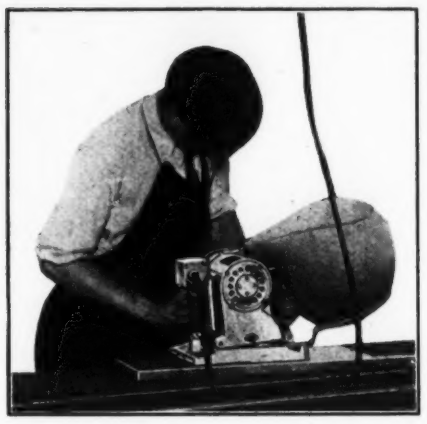
"The system of handing out supplies, after they are purchased and stored in the storerooms of the board of education is systemized. Nothing is given out unless upon an order from the school principal or someone else in authority. A record is kept of everything that is issued and the business manager can tell if there is any disposition to waste."

STANDARDS FOR SWIMMING POOLS

The committee on swimming pools of the American Public Health Association has received numerous requests during recent years for a standard code, which may be used as a basis for regulations governing the sanitary control of swimming pools.

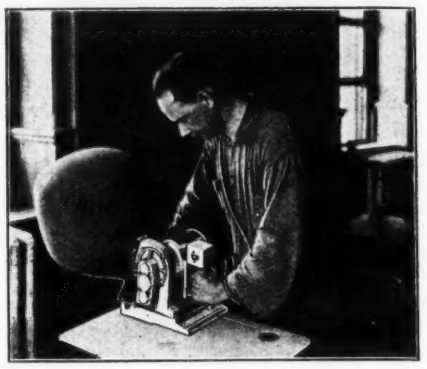
The committee in its report to the Conference of State Sanitary Engineers in May, 1926, recommended some tentative standards for the design, construction, and equipment of swimming pools, and in another report in the fall of the same year incorporated the tentative standards of water quality which had previously been prepared in 1923. The reports were referred back to the committee for revision and correction so that a final report might be presented at the 1927 meeting.

A brief historical preface, together with an appendix, giving illustrations of the method of computing the bathing loads on typical pools, has been



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CLARKE Vacuum Portable Sanders are used by Leland Stanford University, University of Georgia, University of Pennsylvania, University of Illinois, Boards of Education of Chicago, New York, Washington, and all principal cities, as well as leading schools and colleges throughout the country.

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prepared for publication with the standards which have been finally adopted.

The committe has recommended the adoption of the standards with the incorporation of the suggested changes and revisions.

Illustration of Computation of Bathing Load Limits for a Typical Swimming Pool Based on the Estimated Requirements

Estimation of the number of bathers who may safely be permitted to use a pool at one time.

Case 1. Assume a pool 60 by 20 ft. in area, minimum depth 5 ft., capacity 50,000 gallons. No diving board or other specified diving area. Entire area 1,200 sq. ft. is swimming area. Allowing 27 sq. ft. per person, the maximum safe load at one time is 1,200÷27=44 persons.

Case 2. Assume the same pool as in case one, with a diving board projecting 10 ft. at the center of one end of the pool. As the pool is 20 ft. wide and a 10-ft. radius from end of the board is reserved for diving, the diving area is 400 sq. ft. The safe limit for this area is 12 persons. The swimming area is reduced to 800 sq. ft. in which the maximum safe load is 800÷27=30 persons. The total maximum safe load at one time under these conditions is 30+12=42 persons.

Case 3. Assume a large pool, 18,000 sq. ft. area, deep water with one diving tower in the center, a water depth less than 5 ft. on 75 per cent of the pool area. The safe load at one time should be computed separately for each of these zones. Diving area may be computed as a circle of 14 ft. radius measured from the center of the tower, with simultaneous diving in each of the 4 quadrants. The diving area = 616 sq. ft. with a maximum safe load of 48 persons. The shallow or wading area = 75 per cent 13,500 sq. ft., in which the maximum safe load is 13,500÷10=1,350 persons at one time. The swimming area is 3,994 sq. ft., in which the maximum safe load is estimated at 3,994÷27=148 persons at one time. The maximum safe load at one time in this pool may be estimated as 48+1,350+148=1,546 persons.

The estimation of permissible maximum bathing load limits in relation to water replacement and disinfection.

Case 4. (Fill and draw pools with intermittent disinfection.) Assume a pool of 50,000 gallons. Under XXVII, A, 50 by 20 = 1,000 persons may use the pool before it must be emptied; cleaned and refilled. Assuming the water supply conforms to the requirements, 50 by 7=350 persons may use pool after filling before disinfection is required. After complete disinfection 350 additional persons may use pool before a second disinfection is required. After second complete disinfection 300 additional persons may use pool at which time 1,000 persons will have used the pool and the water must be replaced.

Case. 5. (Flowing-through and recirculation pools.) Assume a pool of 50,000 gallons with water being withdrawn and replaced with new or filtered water at a rate of 2,000 gallons per hour. Under XXVII, A, the volume of new clean water being added would be sufficient for 2 by 20=40 persons per hour or 400 persons during a 10-hour bathing day. If the flowing-through or recirculation were continued through the entire 24 hours, with bathing limited to 10 hours, there would be an accumulation of 2,000 by 14=28,000 gallons of clean water during the nonbathing interval or a sufficient amount for 28 by 20=560 additional persons. The total load on this pool would therefore be limited to 400+560=960 persons per day by the clean-water requirements.

If disinfection were intermittent the number of persons using this pool between any two consecutive complete disinfections would be 350 as in Case 4. The maximum usage which could be made in one day under the stated conditions with intermittent disinfection would be as follows: After complete disinfection in the morning 350 persons could use the pool. A second complete disinfection conld then be given the pool and an additional 350 persons permitted to use pool. A third complete disinfection could then be given and an additional 260 persons be permitted to use the pool before the volume load limit of 960 persons was obtained.

With continuous disinfection it must be assumed that the pool is in a state of complete disinfection at all times while the excess chlorine is within the limits prescribed. Under these conditions the rate of water replacement would govern, and 960 persons per day could use the pool.

It will be noted that if the maximum-safe-load-at-one-time rule were strictly observed it would require over 21 consecutive classes of 44 persons each or an average of one class every 28 minutes to attain this maximum in one day. The committee has no sufficient information on pools operated with excessively high bathing loads, and it is possible that the required chlorine content could not be maintained under the extreme conditions stated. It seems probable, however, that if classes were kept within the safety limits specified and the chlorine content maintained within the prescribed limits, the other stated load limits would be unlikely to be exceeded in ordinary practice.

EMPLOYING TEACHERS

Writing in a recent issue of *The Nation*, Mr. Thomas Minehan points out some abuses in which superintendents of schools and school boards engage in the employment of teachers. The tests which some boards of education set up concerning the teacher's habits, activities, and personal beliefs are anything but American in spirit and could not stand the test of legal scrutiny.

In touching upon one phase of the subject, that of religion it may be well to recall a letter which Theodore Roosevelt wrote when he was president.

"THE WHITE HOUSE,
Washington, Oct. 16, 1908.

"My dear Mr.——

"I thank you for your letter of the 14th instant. If asked by Mr. Taft, I should most emphatically advise against his making any declaration as to his religious belief such as your friend suggests. If there is one thing for which we stand in this country, it is for complete religious freedom and for the right of every man to worship his creator as his conscience dictates. It is an emphatic negation of this right to cross-examine a man on his religious views before being willing to support him for office. Is he a good man and is he fit for the office? These are the only questions which there is a right to ask, and to both of these in Mr. Taft's case the answer must be in the affirmative.

"In my own cabinet there are at present Catholic, Protestant, and Jew—the Protestants being of various denominations. I am incapable of discriminating between them or judging any one of them save as to the way in which he performs his public duties. The rule of conduct applicable to Catholic, Protestant, and Jew as regards lesser offices is just as applicable as regards the presidency.

"Very truly yours,

"THEODORE ROOSEVELT."

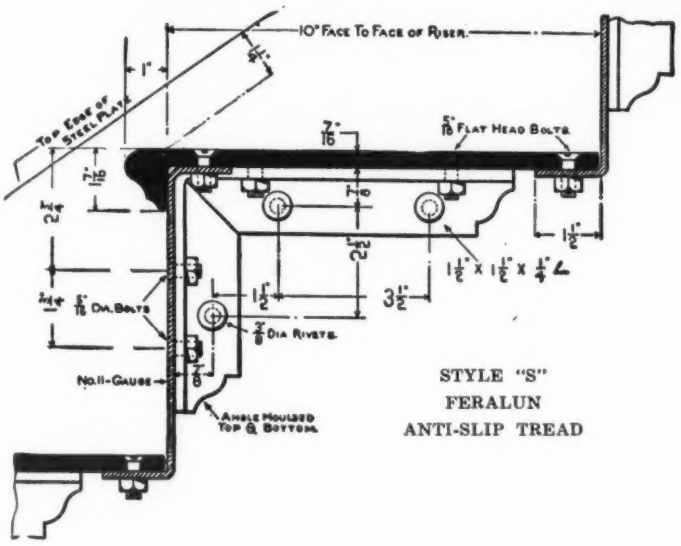
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Safe Stairways are more necessary in schools than in any other type of public buildings. Large numbers of heedless and thoughtless children must be provided with safe exits under normal conditions of use as well as in time of fire or other disturbances.



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FERALUN
ANTI-SLIP TREAD

Architects and school executives in all parts of the country are specifying Feralun Treads. They know from experience that they provide the best insurance against stairway accidents.

Moreover, Feralun Treads stand the hardest kind of foot traffic. There is no upkeep cost.

Feralun "Style S" Structural Treads, made especially for schools, are the answer to your problem of safe stairways.

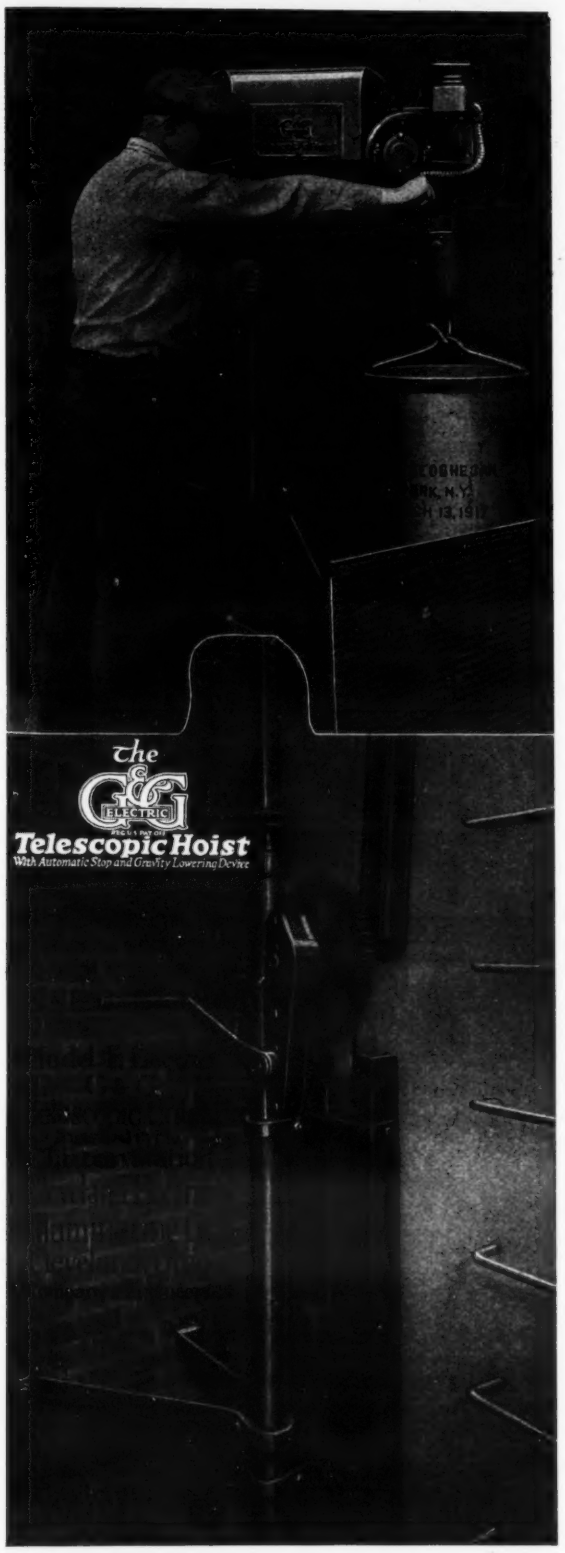
We will be pleased to mail detailed sheets and samples of FERALUN Treads to any school official or architect upon request.

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140 Schools in New York City are using this Model E Electric *for removing ashes*

G&G Electric Ash Removal equipment is popular with schools all over the country—in 44 states to be exact. In New York City alone out of 165 schools using G&G ash removal equipment, 85% prefer the Model E Hoist illustrated.

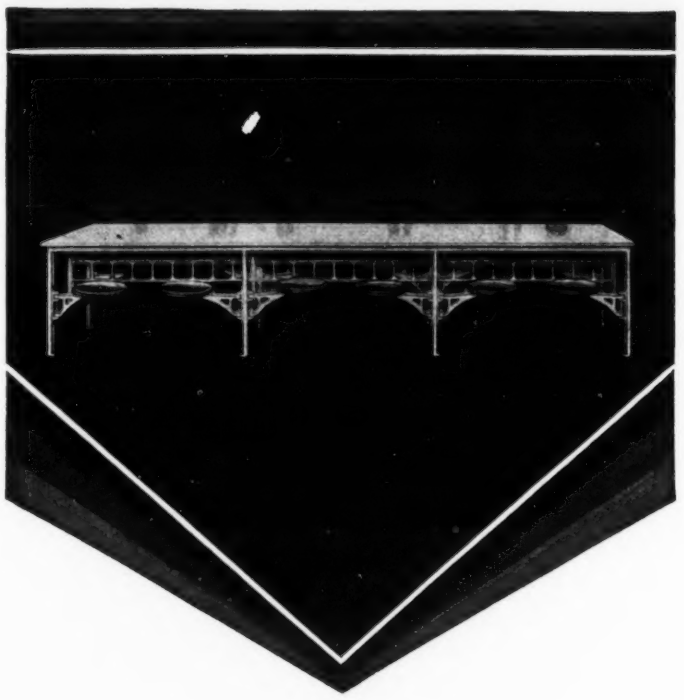
It is ideal for school use for it combines every advantage that schools desire. Economical to operate because only one man needed. Uses surprisingly little current. Safe beyond comparison. Speedy and reliable.

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COMPLETE FOOD AND DRINK EQUIPMENT

The Maryland State Normal School, Salisbury, Maryland, settled the waste disposal problem once and for all.



In small school buildings, too, Kernerator is invaluable



KERNERATOR is the champion of sanitation in school buildings. The Maryland State Normal School is typical of the large number of schools, academies, and seminaries that enthusiastically endorse the Kernerator. Mr. Holloway, principal, writes, "A Kernerator was built into this school building when it was constructed three years ago. It has given perfect satisfaction. It is a splendid means for effective disposal of all combustible waste materials."

Filthy, unsanitary garbage cans and fire hazardous rubbish piles are gone forever when a Kernerator is installed. Garbage, papers, sweepings and refuse of all kinds are simply dropped into handy hopper doors conveniently located on each floor and fall to the combustion chamber in the basement. An occasional lighting burns the air-dried accumulation—no fuel is required. Non-combustibles are flame-sterilized for removal with the ashes.

HERE'S WHAT KERNERATOR ASSURES:

1. Overcomes the chief cause of 75% of school fires through trash piles in the basement.
2. Banishes the trucking of waste paper and sweepings to the basement.
3. Entirely does away with the expense of buying, cleaning and replacing of garbage cans.
4. Provides for instant disposal of refuse from cafe and cafeteria.
5. Makes it unnecessary for foul-smelling garbage wagons to call for garbage.
6. Provides more sanitary surroundings, and greater health assurance.
7. Costs nothing to operate or maintain—requires no fuel—an occasional match burns the waste and air-dried garbage.

There are Kernerator school models as low as $250 and the masonry adds but little more when the regular chimney is used. Send for our new illustrated school booklet which gives valuable information on uses and installation of Kernerator.

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733 E. Water St. **Milwaukee, Wis.**

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THE CHIMNEY-FED INCINERATOR

Garbage and Waste Disposal



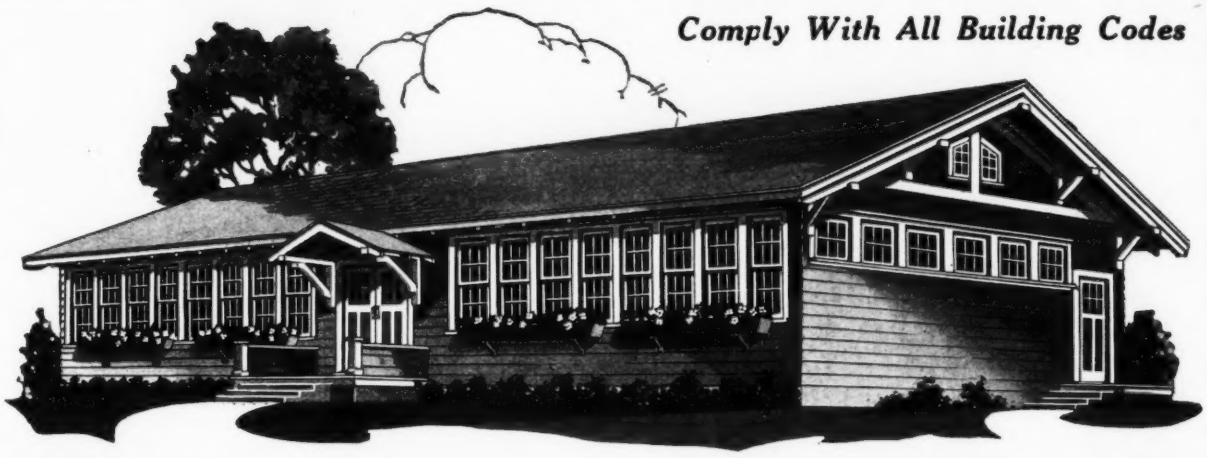
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Strongest Buildings of them All

Light—Snug and Perfectly Ventilated

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Patented from Foundation to Roof

Here's the solution of the school question for fast growing districts and the limited school board budget. These splendid buildings recognize no competition where quality of material, construction strength, and the welfare of the children are considered. No other buildings can give you our ingenious in-built features, for this construction is exclusive in Harris Schools and is covered by patents from foundation to roof.

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for 40 to 400 Pupils in 10 Days!

Harris Unit-Made buildings are invariably specified when the bids are opened. Why? Simply because they give you stronger, better made, better looking buildings at by far the lowest prices. All made possible because they are built in the largest and best equipped factory in America, backed by our own lumber and millwork factories. And we pledge ourselves to give you the satisfaction you have a right to expect.

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HARRIS BROTHERS CO.

35th and Iron Streets

NEW YORK CHICAGO, ILL. DETROIT

Use Our Bureau of Information Freely!

KEEPING SCHOOL BUILDINGS CLEAN

(Continued from Page 46)

2. Dusting

a) All classrooms, special rooms, and offices should be dusted daily with a sanitary wool duster oiled to catch and hold all dust.

b) Desks, tables, chairs, rails, chalk trays, window sills, tops of radiators, pianos, shelves, casts, and any other type of furniture should be included in this process.

c) All woodwork such as doors, blackboard railing, window casings, door frames, and baseboards should be dusted weekly.

d) Walls and ceilings should be dusted twice yearly.

e) Pictures, window shades (where not washable), flags, and small pieces such as placques, etc., should be dusted two or three times per year.

f) Bookcases and display cases should be dusted daily.

g) Radiators should be dusted weekly with a narrow radiator brush, dusting the space behind and below them at the same time.

h) Dusting of classrooms should be done after sufficient time has elapsed to allow the dust to settle thoroughly and before the rooms are again occupied. Woodwork should be dusted on Saturdays. Walls, ceilings, pictures, and radiators should be dusted on Saturdays and during the vacation periods.

3. Scrubbing and Mopping

a) Linoleum-covered floors or other special floor coverings should not be mopped or scrubbed with soap and water as this is injurious. A floor cleaner consisting of liquid cleanser, disinfectant and a preservative such as wax or asphaltum or some petroleum base should be used.

b) Oiled wood floors should be scrubbed with soap and water and immediately oiled again, allowing only time sufficient for the wood to dry between scrubbing and oiling.

c) Linoleum classroom floors should be mopped and waxed three times per year and corridors monthly.

d) Oiled classroom floors should be scrubbed and oiled three times per year and oiled corridor floors once each month.

e) During rainy weather, entrances and connecting corridors and stairways should be mopped daily and in some cases twice daily.

f) Clinics, cafeterias, kitchens and such places should be mopped daily.

4. Cleaning and Polishing of Woodwork and Furniture

a) All woodwork and furniture should be washed with soap and water and polished with a good grade of furniture polish at least three times per year. Floor oil or any other greasy material should never be used on woodwork or furniture.

b) Where woodwork or furniture have been scratched or marred, a liquid wax should be used instead of furniture polish, as this will aid materially in resurfacing.

c) Only cheesecloth or soft woolen cloth should be used for polishing or waxing furniture or woodwork.

5. Cleaning of Windows and Other Glass

a) Windows should be washed on the outside at least three times per year. All windows should be washed on the inside once per month.

b) Glass in doors should be washed twice each week.

c) Glass in cupboards, cases, mirrors, and partitions should be washed once each week.

d) Transoms, glass in pictures, electric-light fixtures, and skylights should be washed three times per year.

e) Windows and other glass may be washed during school hours where such work will not interfere with special work being conducted in the classroom or clinic.

6. Cleaning of Window Shades

a) All window shades should be cleaned at least twice each year and should be done by a special worker in addition to the regular staff of custodians. Shades made of ducking, whipcord or similar material should be removed, then placed in a washing machine with a solution of warm water and linseed-oil soap and thoroughly washed. They should then be thoroughly rinsed in clear warm water, passed through a wringer and ironed dry.

7. Toilet Cleaning

a) Toilet floors should be cleaned daily by both sweeping and mopping.

b) Toilet bowls, seats and urinals should be cleaned at least once each day, and where ventilation is poor, twice per day.

c) Toilet-room floors should not only be flushed with a hose daily but should be scrubbed with a scrubbing brush.

d) Bowls, urinals and seats should be scrubbed with cleansing powder as often as any odor is detected in addition to the daily cleaning. Deodorents and disinfectants shall not be used in place of scrubbing.

8. Cleaning of Drinking Fountains, Sinks and Lavatories

All drinking fountains, sinks, and lavatories should be scrubbed daily with detergent or some equally effective abrasive cleaner. When lavatories are used excessively, such cleaning should be done twice each day.

9. Heating and Ventilating

a) Firing should be done from a wheelbarrow or coal truck. Coal should not be dumped on the floor in front of furnaces.

Attention should be given furnaces every half hour during the firing period, beginning early enough to have the building up to temperature (68 to 70 deg.) when the children arrive. All fires should be banked as soon as can be done without cooling the building off before classes are dismissed.

b) Each hour during the day a record of room temperature should be made from the reading taken on the caliscope or telatherm.

c) No coal dust or dirt should be allowed on the floors of the furnace room. This room should be as clean as any classroom.

d) Coal should be wet down several times a day to prevent dust and aid in combustion of volative matter. Furnace-room floors should be flushed and swept several times each day.

e) Ashes should be drawn each day after school closes, and should always be removed so that dust does not escape during the process.

f) Plenum chambers should be flushed down each week and the tops of the furnace flushed off.

Fan rooms should be cleaned each day. Dirt and dust should be removed. Fan rooms should never be used to store material of any kind.

Air filters must be cleaned daily. Each day at least 10 per cent of the total number of cells should be thoroughly washed with hot water and oiled. The next day these cells should be replaced and others removed for cleaning.

The Hamtramck board of education feels that next to the principal, the head custodian of the building is the most important unit in the organization: First, because the physical environment is one of the most important factors in the health of the child; second, because of the influence the custodian can exert on moral

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conditions, safety and standard of cleanliness; third, because of the economic value of the property under his care. More is required of a head custodian today than was required of teachers only a few years ago and custodians are much harder to replace. Our sources of supply for teacher replacements are numerous. A custodian cannot be procured from any source of supply, but rather must be trained and developed within the organization, as also must the staff for maintenance, repair, and upkeep.

CONSOLIDATION AND TRANSPORTATION IN NORTH CAROLINA

The state education department of North Carolina has issued a report on the status of consolidation and transportation in the state, pointing unmistakably to progress in this phase of the school situation. Over a period of years, it is revealed that the number of small schools has decreased and the number of larger schools and number of pupils transported to and from the school has increased.

While it is not definitely known when the movement for consolidation began, it is known that the idea of consolidation was supported during the early administration of former State Superintendent Joyner. The figures relating to the one-teacher school prove that effective results were obtained, for in 1901-02, there were 7,867 schools of this type, 5,491 for the white race and 2,376 for the negro race. At present, there are 1,178 schools of this type for the white race and 1,162 for the negro race.

The beginning of the elimination of the two-teacher schools does not date as far back as that of the one-teacher schools. Starting with 1915-16, when the first statistics were available, there was an increase in this type of school for the white race each succeeding year until 1921-22.

In 1922-23, and each succeeding year, there was a decrease in the number of white two-teacher schools. For the negro race, there was an increase in the number of two-teacher schools during the period from 1915-16 to 1924-25. A slight decrease is noted in the number of negro schools of this type since then. At present, there are 1,046 white schools and 690 negro schools of this type.

The report shows that the number of white three-teacher schools increased from 411 in 1916-17 to the maximum of 633 in 1920-21. Since that date there has been a decrease in this type of school for the white race. For the negro race, the number of schools of this type has increased each year during the period under consideration. In 1916-17 there were 65 and in 1926-27 there were 254 three-teacher negro rural schools.

In 1916-17, there were 378 rural schools for the white race having more than three teachers; in 1926-27, there were 949 rural schools for whites having more than three teachers per school. During this same period, the number of rural schools for negroes having more than three teachers increased from 31 to 211. In 1916-17, there were 409 rural schools for the two races having more than three teachers per school. During the school year 1926-27, there were 1,160 rural schools of this size.

The statistics show clearly that the larger type of school is on the increase in the state. It has been proved that the larger the school, the better trained is the teaching personnel, and assuming that the better trained teacher can give a higher type of instruction, it follows that the children of the state are afforded a greater educational opportunity by this tendency in the size of schools.

At the close of the year 1926-27, there were 940 rural consolidated schools in the state. Of this number, 819 were for white children and 121 were for negro children.

An interesting factor in the report is the fact that the more than six-teacher schools shows the greater increase. The group of five- and six-teacher schools show a decrease for each of the races.

The report shows that Rutherford county, with 26 schools, heads the list of counties having consolidated schools. Gaston and Mecklenburg each has 24 consolidated white schools. Only one county, Cherokee, has no consolidated schools having as many as four teachers.

In the matter of transportation, it is shown that a total of 983 schools were provided with transportation facilities during 1926-27.

The growth in number of vehicles used and pupils transported has been remarkable. In 1914-15, six vehicles were used to transport 247 pupils to and from the large rural schools. Five years later, 1919-20, the number of vehicles had increased to 150, and 7,936 children were transported. The past year, 1926-27, there were 2,876 vehicles used in transporting 111,725 school children.

In the work of transportation, the 2,876 trucks traveled 68,821 miles per day, nearly three times the distance around the earth, at a cost of $1,581,119.78.

The largest total mileage was in Rockingham county, 2,453 miles a day for the 50 trucks, or 49 miles per vehicle. The largest average mileage per vehicle was in Cumberland county, where each vehicle ran on an average of 54.3 miles per day. The cost of transportation varied from county to county and was affected by the pupil, the mile, and the vehicle.

Comparing North Carolina with the country as a whole, North Carolina ranks second among the states in the number of school busses used, second in the number of pupils transported, second in number of miles of the route, and third in the cost of operation and maintenance.

SUMMER PLAYGROUND FESTIVAL

—A huge festival in which the playgrounds of the city participated, was held at the school stadium, St. Louis, Mo., on Saturday, August 25. A total of 63 public-school playgrounds and about 14,000 children participated in the activities. A large number of the parents accompanied the children to the grounds which brought the total attendance close to 25,000 persons.

Throughout the day, a vast throng was entertained with a continual round of events. The winners of group championships in the various inter-playground games met in an elimination contest to determine the city champion in each particular game. These included dodge ball, junior and senior horseshoes, junior and senior playground baseball for boys, end ball, volley ball, net hand ball, and playground baseball for girls. There were also a track meet for playground children in which the winners were awarded a definite number of points. The playground attaining the greatest number of points throughout the day was given the patrons' alliance trophy, a silver cup donated by the St. Louis public-school patrons' alliance, which becomes the permanent possession of the winning playground.

A pageant, in which all the playground children participated, brought the festival to a close in the evening.

The festival which was the first attempt of the kind in St. Louis, was arranged and directed by Mr. Redowe H. Abeken, general supervisor of the St. Louis school playgrounds, assisted by a large staff of directors and instructors.

101 YEARS OF MANUFACTURING EXPERIENCE



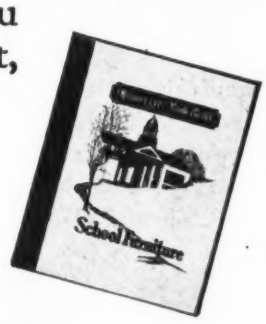
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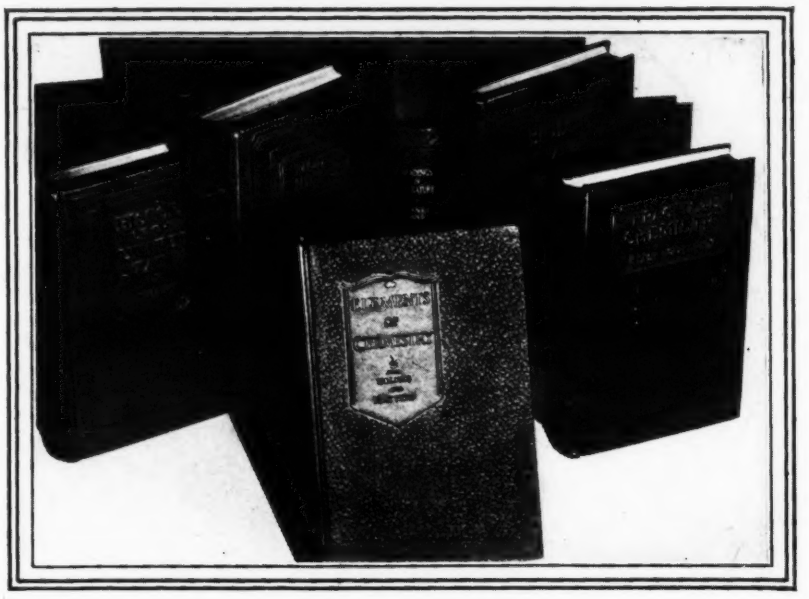
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PAYMENT OF TEACHERS DURING ILLNESS

(Concluded from Page 39)

10 pay $5; 10 pay $6; 2 pay $6.50. High-school teachers, 5 pay $5 a day; 9 pay $6; 9 pay $7; 2 pay $7.50; 5 pay $8.

A number of the school boards report that, while they pay for the first 10 days, the teacher must pay thereafter during the time that she is out.

Suggestive Comments

Several of the Ohio school superintendents, in answering questions, submitted their comments. Superintendent Dietrich of Bucyrus said: "Teacher absent receives the difference between the substitute's pay and her own. The board, therefore, is not out any pay for the substitute." Superintendent Richardson of Cuyahoga Falls, said: "We have tried every kind of adjustment for teachers' pay and have found that 'no work, no pay' is the best plan. It avoids perplexing questions and charges of favoritism."

Superintendent Conkle of Medina, says: "Teachers losing time for sickness, or sickness in the family, receive one-half pay. When they have accumulated 10 days' absence they receive no pay for absence in excess of 10 days in the same school year."

Favors Bonus System

Superintendent W. A. Franks of Euclid Village, Ohio, reports on the bonus system which has been in use there for the past 5 years. "The bonus system," he says, "gives to each regular member of our teaching force the sum of $50 at the close of the school year for perfect attendance, 3 days being allowed at all times with no deduction on account of death in the immediate family. For each day's absence from school on account of sickness the teacher loses $5 from this $50 bonus, although her regular salary goes on just the same. Thus, if a teacher is absent for 10 days on account of illness, she has exhausted her bonus of $50 and receives none of it. She will receive her full salary for the 10 days so lost, but following this period per diem deductions are made from the monthly salary. Should a teacher be absent 5 days out of the entire school year, she will have no regular salary deduction but will receive only $25 bonus at the end of the school year. Our system has been to include whatever bonus is due the teacher with the last month's salary.

"Under the old system of allowing 10 days' sick leave with full pay, I found many willful violations of the rule which was made through the courtesy and kindness of the board. Also, the scheme tended to penalize those teachers who were faithful and conscientious and who took good care of their health. We feel that our bonus system has worked wonders with the regular attendance of teachers and has helped in keeping up a fine spirit among the force. It actually rewards those who are conscientious and interested in their work and who take care of their health that they are not required to take a day off, particularly Monday, to recuperate after a week-end party."

The Mayfield, Ohio, board of education is inclined to favor the Euclid system and Supt. Shuman makes a recommendation to that effect. In working out a scheme, the board has agreed upon the following principles:

1. No teacher is entitled to a fixed number of day's absence. That is, no teacher may say she is entitled to 10 days or any number of days' absence during the year.

2. Each day's absence will be considered on its own merits. Pay for scattered days of absence due to *sickness* will be limited to 10 days each year.

3. Recommendation will be made for payment during absence up to one month during sickness when the teacher is in a hospital under the care of a physician.

THE OTHER END OF THE LOG

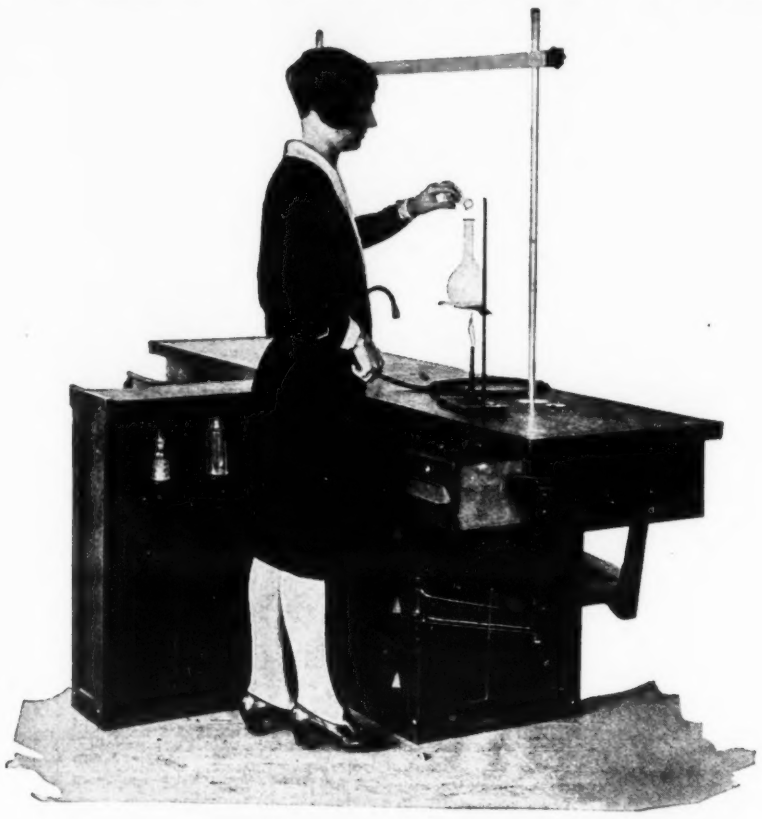
(Continued from Page 44)

Mr. Sharpe was a splendid teacher because he had that magnetic personality that compelled attention, and I think he loved his work. Indeed, some dozen or fifteen years later, when he became superintendent of schools in a much larger city, he admitted to me that, while he appreciated the possibilities of his new position, he regretted exceedingly that he could no longer stand before a class of boys and girls and set their minds to playing with his and with each others. I believe that he really got a good deal of fun out of teaching. He was a severe disciplinarian but a just one. He was, moreover, a man of broad outlook on life, and although he taught Greek and algebra in particular, he taught, incidentally, a good many other things—good sportsmanship, good citizenship, and Christian idealism. I venture to say that few boys or girls passed through that high school while Mr. Sharpe was there without feeling the influence of his personality, and without becoming in some way or other better boys and girls.

Now, after a lapse of 35 years, I confess that I have forgotten much of the Greek and algebra which I learned under Mr. Sharpe, but I have not forgoten the man, I bless his memory.

Dryasdusts, Quizzems, Sharpes, these three represent rather distinctive types of teachers. There is room in collegiate circles for the learned Dryasdusts, but not in the teacher's chair; there should be no room for the Quizzems, to whom the science of education embraces no more than the asking of questions out of one book and the entering of marks in another; there is not only room in both high school and college but a crying need for the Sharpes, men who can do something more than merely "hold recitations."

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In education, the personality of the teacher is of the supremest importance, particularly in one's undergraduate days. I would rather have my son taught algebra, for example, by the captain of last year's Yale football team, provided the latter could keep at least one jump ahead in the subject, than by the valedictorian of the same class, unless he had something more to recommend him than the capacity to acquire marks.

AN INTERESTING CALIFORNIA HIGH SCHOOL

(Concluded from Page 52)

There is a fine library on the first floor, large enough for wall-exposed bookcases and twelve library tables of moderate size. Six chairs are placed at each table. An adjacent connecting studyroom, seating 72, makes it possible for one teacher to control the two groups. However, in this case, two student monitors take entire charge of the rooms without any discipline problems whatever. There is a library workroom and a bookroom, adjoining the library, the latter in charge of a student. A stationery store opening on the hall is also in charge of a student.

A fine cafeteria is installed in the basement of the west wing of the building. This is in charge of a student manager with a faculty advisor. A woman is hired and held responsible for the kitchen. This woman manages two women assistants and a man who acts as head cook. These do all the work, except for a few students who help in the dining room. Approximately 400 are fed daily. All dishes are sold at 5 cents. This entails a loss on meats but a gain on vegetables, so that there is no financial loss. About $60 is taken in each school day. Meals selling at 35 cents under this plan are superior to meals costing 65 cents in town.

The two cooking and the single sewing rooms are also in this part of the building, as well as the housekeeping suite, and the printshop. Each of the cooking rooms is equipped with 14 stoves and is capable of accommodating 20 pupils. The printshop equipment cost $15,000.

The auditorium, which is on the first floor, has an inclined floor and seats 1,200. The stage is well provided for in matters of asbestos curtains, indoor and outdoor scenes, and requisite wings. The acoustic properties are excellent.

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Altogether the building is one of California's fine and interesting schools, every detail of which is calculated to draw pupils closer to their teachers, to provide ample facilities for quiet study, and to inspire children to become future American leaders.

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Since the above was written the city of Santa Barbara was visited by a terrific earthquake which damaged much outlying property and left State Street, the main business thoroughfare, in ruins.

The series of shocks failed, however, to injure the new high-school building. The building was carefully examined after the quake by B. T. Owsley of San Francisco, California. He reported that "the only damage I could see was a small ornament thrown off the front gable. I could not see a crack in any part of the building."

PRINCIPLES GOVERNING TEACHER-PLACEMENT PROCEDURE

(Concluded from Page 58)

a) The place and nature (grade or subjects, related activities) of position to be filled;

b) The salary, term of service, and living conditions;

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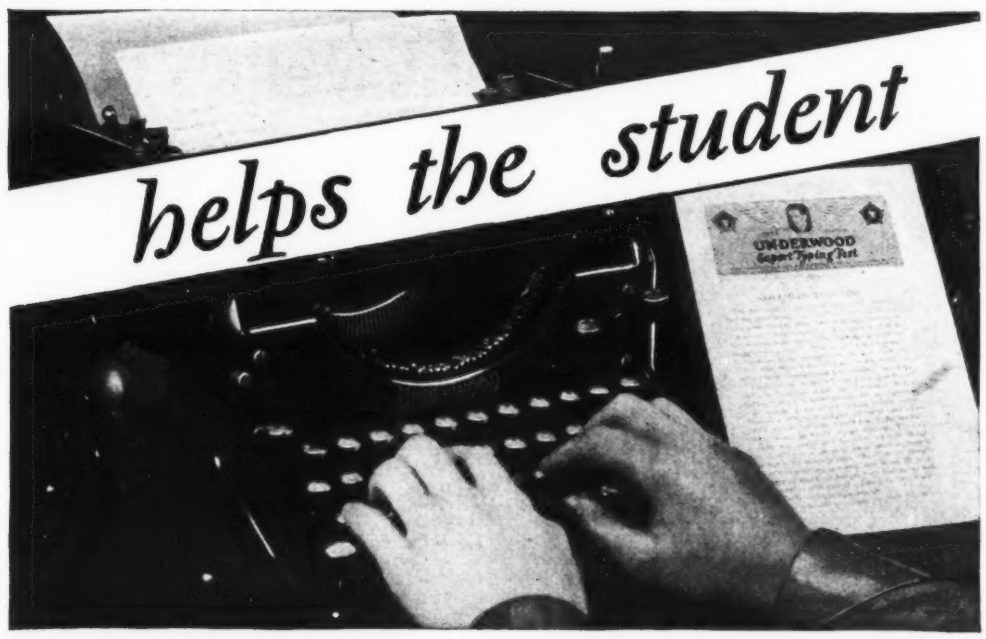
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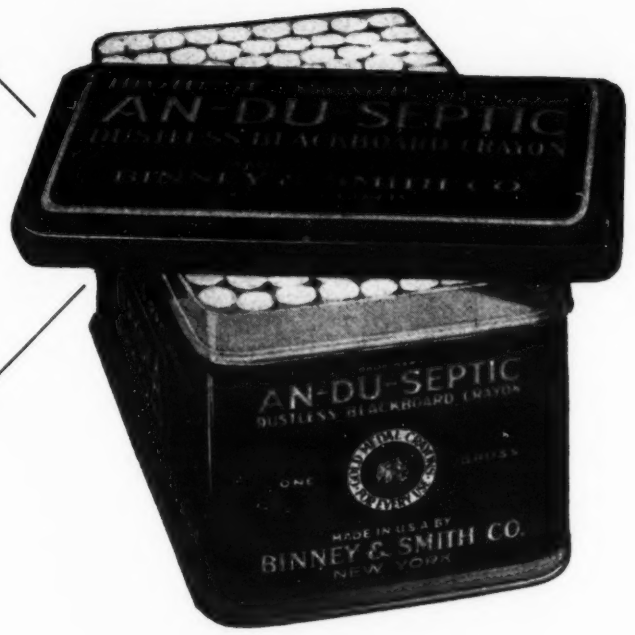
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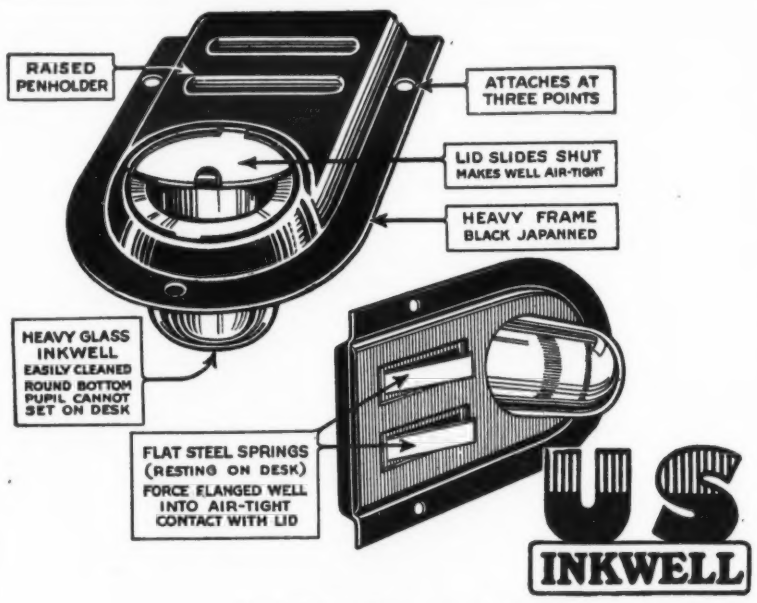
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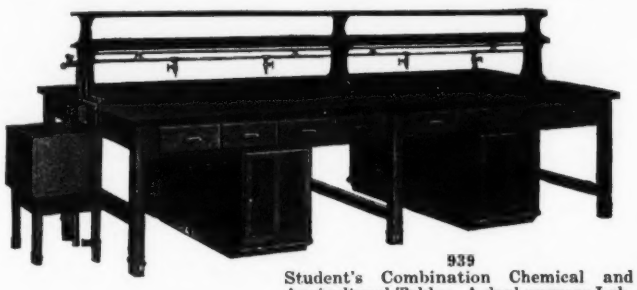
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THE EVOLUTION OF THE PUBLIC-SCHOOL PLANT

(Continued from Page 63)

equipped with patent seats, noted first in the Quincy school.

The second union school was the eighth-ward building, later called the Douglass Houghton, which was opened in 1853 and rebuilt in 1872. Its original cost was $7,500. The first type of permanent schoolhouses erected in Detroit were thus represented by a group of union schools, built to a standard plan under the supervision of Levi Bishop.[6] Among these were the original Barstow, the old Cass, and the Bishop buildings.

The Barstow and Bishop buildings were practically the same, except that the Bishop basement was used for two classrooms, while the Barstow was given over to quarters for the janitor and had more space for fuel storage. These buildings consisted of a basement and three stories, with access through two end corridors and with entrances from both front and back opening into two rooms. Coat closets were placed in these corridors. The first and second floors each had four rooms with means of communication through four central doors. These classrooms, 27 by 28 ft., were lighted from one side by three windows, giving about 9 per cent of natural-lighting area. On the third floor was an assembly room and four recitation rooms.

In the Cass building there were no basement classrooms. There was attached to each end, instead, a one-story wing containing a single room used by the primary department. Classrooms, assembly hall, and corridors were the same size as in the Bishop building.

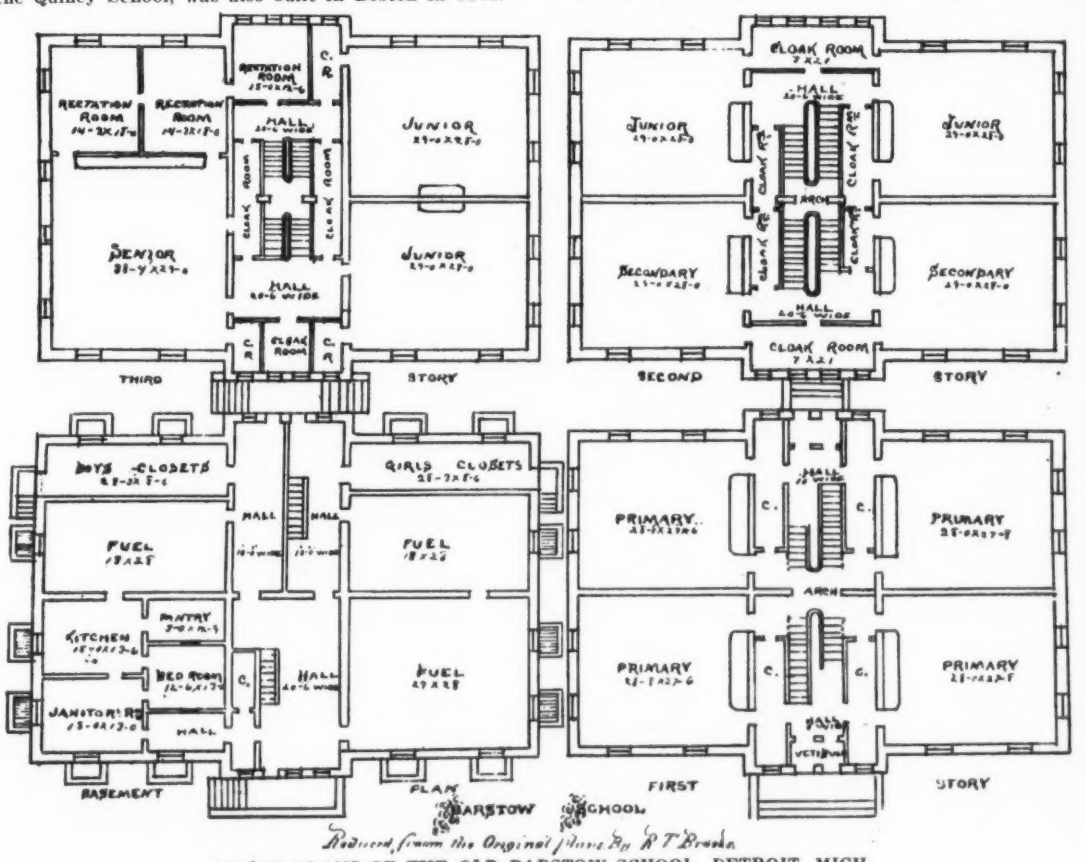
This early type of construction greatly resembled the general plans of the Quincy school, except in respect to the lighting, to which the local board had access through Barnard's book. There also were some minor points of difference, the result of later building. The general room layout was the same, but the central corridor, noticeable in the Quincy building in addition to the end corridors, was omitted in Detroit. The Detroit buildings were three stories high, exclusive of basement; while the Quincy school was four stories, exclusive of basement.[7]

Second Standard Plan

The second standard plan developed in Detroit is represented by the following schools: Wilkins, Everett, Washington, the Second Barstow, Houghton, Jefferson, Tappan, Duffield, and Pitcher. Of these, the Wilkins and the Second Barstow, built in 1870, and the Washington, in 1871, are good examples. One of the chief complaints about the Bishop type was that the use of the end corridors made the rooms too dark. In view of only 9 per cent natural lighting per classroom, this point was well taken. Instead

[6]Member of the board of education, 1846-58.

[7]A three-story and basement school, quite similar to the Quincy School, was also built in Boston in 1848.



FLOOR PLANS OF THE OLD BARSTOW SCHOOL, DETROIT, MICH.

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of increasing the number of windows to a side, however, the board felt that a room lighted from two sides was better adapted to the children's needs. The second plan was, therefore, conceived around the two-wall lighting feature and resulted in the development of a certain corridor. The Second Barstow school plan, 1870, is presented as an example of this type.

This building was of brick, three stories and basement, surmounted by a small cupola containing the bell.[8] A central corridor, 20 ft. wide, extended the length of the building, with access from the outside in front only. Narrow windows in the front and the rear gave the necessary lighting.

Two stair wells, leading to the upper floors, were centered and very poorly lighted. In addition, two arches, placed in the middle of the first-floor corridor, cut down the free space required for passing from the front to the rear of the building.

Provision for furnaces, fuel, closets, and janitor's quarters was made in the basement. The janitor made his home in the school, with a living room, kitchen, pantry, and a bedroom built against the inside wall without outside lighting—a thing that would be condemned now as decidedly unhealthful.

On the first floor were four rooms, each 27½ by 28 ft. These were lighted from two sides by four windows, giving about 12 per cent lighting area. The seats were so arranged that the light fell upon the desks from the rear and one side, and were planned to seat 56 children, allowing a trifle less than 15 sq. ft. of floor space per child.

The first floor was used by the primary division and the second floor by secondary and junior classes. A big change appeared in the development of the third floor, allowing only

[8]The elevation was similar to the Houghton Union School reproduced here.



HOUGHTON UNION SCHOOL (1872), DETROIT, MICH.

one half of the floor space to the assembly room and to the recitation rooms. The other half was divided into two classrooms for the junior department. In the rear of the second-story corridor was a cloakroom, and on the third floor a recitation room. Some of the buildings in this group varied slightly from the general type. Some buildings carried the staircases against the walls instead of in the center. Instead of single windows the Duffield, Pitcher, Tappan, and Jefferson buildings had four double windows to a classroom. In the Duffield and Everett buildings the third-floor assembly room had practically evolved into what was later known as a double-A room, with recitation rooms leading from it.

Change in Organization

The nine-year union school and the three-year high school had practically disappeared by 1872. While the ninth year was still housed in union buildings, this was only a temporary expedient until the new Capitol High School was completed. The new organization might be described as a 4-4-4 type. The primary and grammar grades, quite distinct in organization at this period, were housed in an elementary building and, after 1876, the last four grades were organized in the new high-school building. The development of a more carefully graded instructional organization leads to a number of corresponding changes in the physical plant after 1872.

HIGH-SCHOOL FAILURES

(Continued from Page 61)

students who are seeking a short cut to graduation. These schools are not always under the supervision of the high authorities, and yet these authorities are expected to honor the work done therein, by granting credit equal to the credit given in the regular high school.

In other words, after a student has made an utter failure in a certain subject of his regular high-school course, he may attend a free-lance summer school for six weeks, and present to the high-school principal a certificate, purporting to show that he has removed the failure and completed the subject creditably. Or, the student may bring in a certificate showing that he has completed in six weeks certain new work, which ordinarily requires one school year, and expect to have regular credit allowed and counted toward graduation.

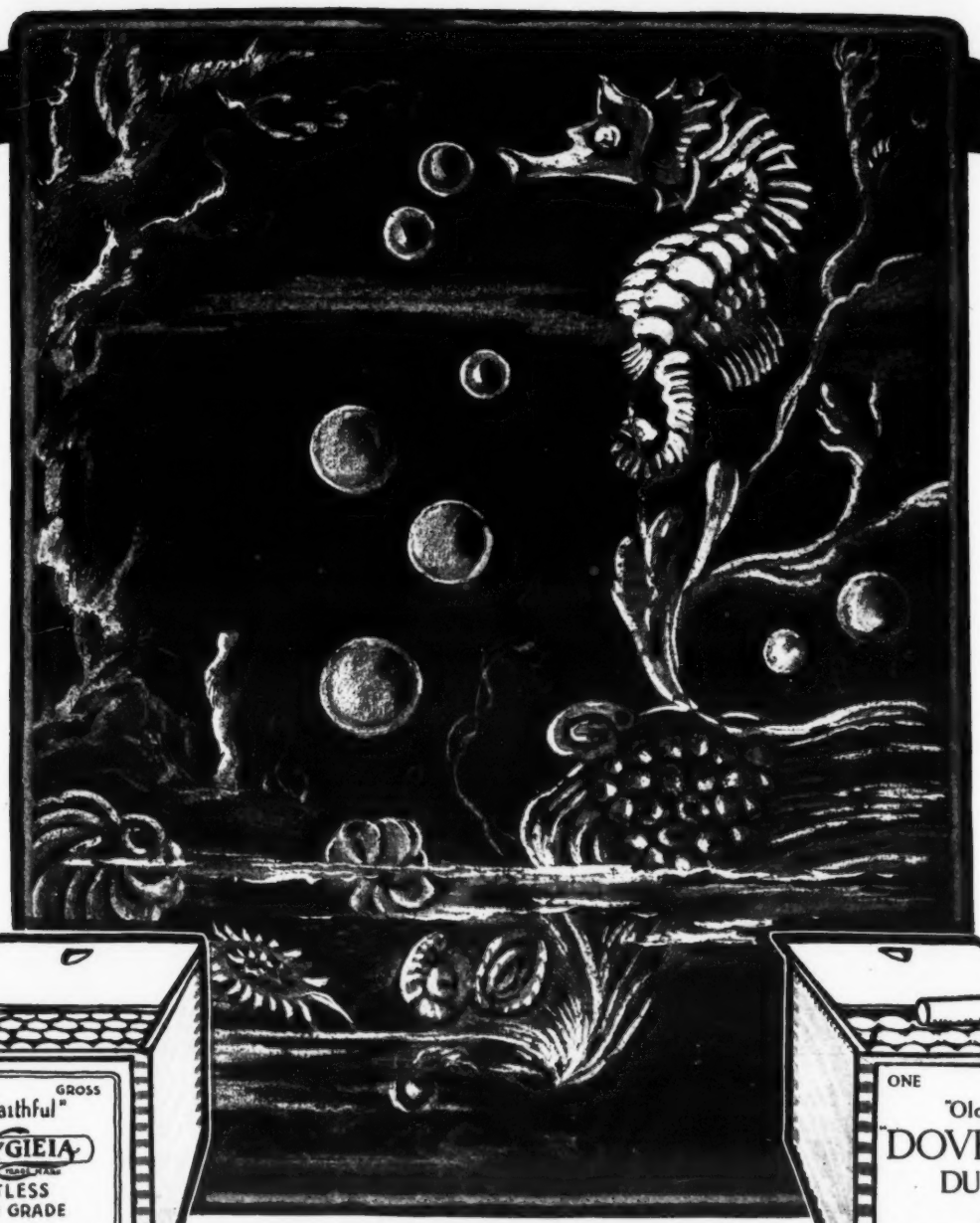
Evil of Bootleg Summer Schools

If regular high-school authorities continue the practice of granting credit for such work over a period of years, the high-school curriculum is disorganized and disrupted and the scholastic standards are lowered to such an extent that high-school graduation means nothing, insofar as scholarship is concerned. And what is more pertinent to our discussion, students of the high school gradually acquire an attitude of indifference to their work, with the idea that failures may be made up in summer school. High school becomes a place where pleasant

(Continued on Page 142)

When you use a piece of chalk you hold in your hand the shells of thousands of tiny sea creatures that lived many years ago. When these "foraminfera" died their tiny shells became consolidated into soft chalk.

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(Continued from Page 140)

social relations are formed, where failures are taken lightly, and serious work is comparatively rare. That intangible something called "morale" is destroyed and failure is the order of the day.

Outside work which is done under private individual tutors, and which is not under the supervision of the high-school authorities, may be placed in the same category with work done in free-lance summer schools, as undesirable and pernicious to an alarming degree.

The writer does not wish to be understood as condemning all summer schools, or as consigning to perdition all outside work of whatever nature. It is altogether fitting and proper that students be allowed to make up work outside of the regular high school, provided, that such work is under the supervision of the high-school authorities, and provided, further, that the regulations for the granting of credit for such work be as rigid and exacting as in the regular high school. Only in this way may outside work be prevented from becoming a direct factor in causing failure in the high school.

The attitude of parents and school executives determines, in large measure, the status of a school in connection with the problem of failure. The high-school principal must be constantly on the job if he is to keep failing pupils in line. He must keep parents informed when pupils are doing unsatisfactory work, and it is the duty of parents, not to hold the teacher altogether responsible for failure, but to cooperate in every way possible with teacher and principal in their efforts to find the trouble and to correct it. The principal should check up and investigate every failure and endeavor to make proper adjustments or recommend suitable remedial measures. He should apply stern disciplinary measures in the cases of indolent and willful failures. In addition, he must inspire both student body and teaching staff with a wholesome contempt for failure, and create a morale that radiates success. If failure has become a habit, he must break up the habit and substitute in its stead the habit of success.

This is a large order, but it is part of the work for which the principal is receiving a salary. If he is not filling the order, then he himself is a failure, and is becoming a factor in the failure of other people.

Methods for Preventing Failures

The entire responsibility for the solution of the problem of failure rests squarely on the high-school principal and the teaching staff. It must be remembered that failure cannot be removed altogether. Neither can any principal or faculty hope to cut down failure to a minimum in a day or a month or even a year. The process is long and laborious and necessitates continuous and systematic application of preventive measures. The main objective should be the creation of a school morale, which is antagonistic to anything that smacks of failure.

Antifailure devices will prove to be effective only when the teaching staff is thoroughly imbued with the idea of keeping failures down to a point consistent with sound educational principles. Therefore, the wise principal must begin with his faculty. He must secure the hearty cooperation of every teacher, or his antifailure crusade falls before it starts. One noncooperating teacher is sufficient to destroy whatever good that may be accomplished by all the others.

Taking into consideration the varying conditions of different communities, the writer suggests that some of the following antifailure devices might be generally effective:

Parents should be kept informed as to pupils who are doing unsatisfactory work.

Rigid enforcement of regular attendance.

Supervision of elementary work to the end that pupils may be adequately prepared for high-school entrance.

High-school curriculum adjusted to the needs and abilities of pupils.

The inculcation of good study habits, with especial insistence on home study.

Regulation and supervision of extracurricular program to the end that it may be used to raise scholastic standards.

Classification of pupils in accordance with the results of standardized tests, properly supplemented by a consideration of home environment, previous scholastic record, and the natural desires of the pupil. In this connection, extreme care should be exercised to see that pupils do not abuse the elective privilege.

Grading system sufficiently flexible to stimulate scholastic effort. Teachers should not be allowed to prognosticate failure.

Insistence upon a full set of textbooks for each pupil.

Strict regulation and supervision of outside and summer-school work to the end that credit may be allowed only for work which is equivalent to work done in the regular high school.

Competitive scholarship should be encouraged and proper recognition accorded to outstanding work. Exemption from final examinations of all pupils who make averages of 90 per cent or more in daily work, is suggested as desirable.

The so-called uneducable group should be kept sufficiently busy to avoid disciplinary problems.

The establishment and maintenance of proper personal contact between teacher and pupil. It is not sufficient for the teacher to announce to his classes his willingness to assist failing pupils when they request it. He must take the initiative and help such pupils in spite of themselves; he cannot expect all pupils who need assistance to ask for it.

The organization of coaching classes for failing pupils. The principal has a right to expect

(Concluded on Page 145)

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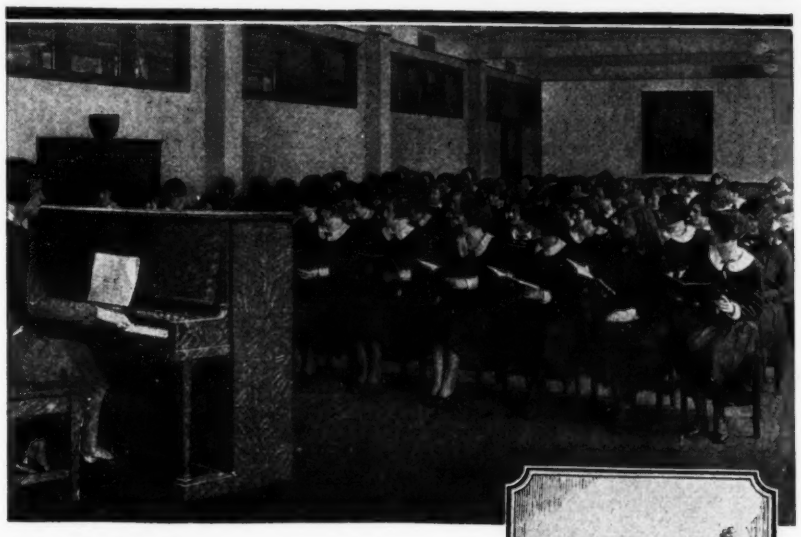
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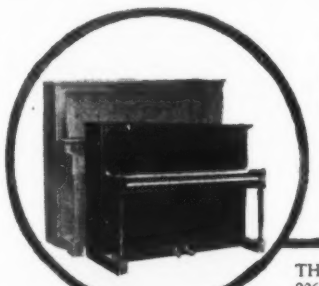
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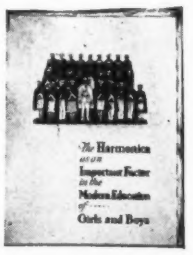
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In addition, authorities in many fields of educational and social endeavor regard the modern Harmonica as a decisive moral force in shaping the lives of the youth of the land.

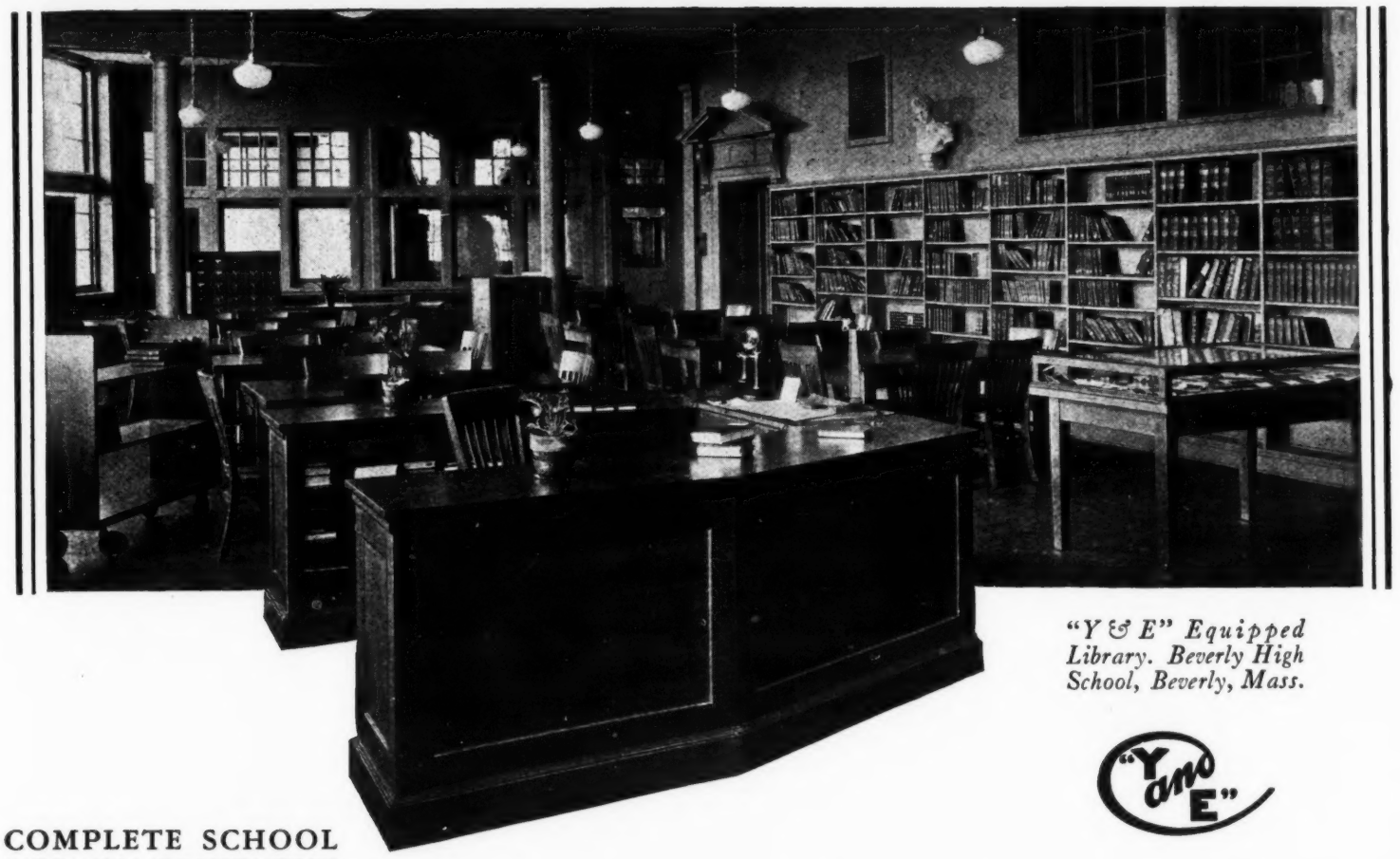


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(Continued from Page 142)

the absolute cooperation of teachers in this respect.

The establishment of a regular schedule of teacher-pupil, principal-pupil, and teacher-principal conferences for the benefit of failing pupils. Such conferences should not take on the appearance of disciplinary measures. The principal and teaching staff should manifest a genuine desire to be of assistance to those who are failing, and should make strenuous efforts in that direction. Parents may be invited to these conferences.

Habitual loafers should be sternly disciplined.

In general, pupils cannot be left to their own resources in the matter of study. It is the duty of the teacher, not only to assign a reasonable amount of work for each pupil to do, but to insist that the work be done.

In conclusion, it may be stated that the foregoing suggested antidotes for failure, are not expected to be applicable to every situation that may arise in the high school. Nor is it claimed that immediate and miraculous results may be realized from the application of any one or all of these remedial measures. The principal or teacher who is confronted with an unusual number of failures must first of all determine the causes of the failures and then seek to apply suitable remedies. The writer has merely attempted to suggest some remedies that might prove to be helpful in situations that are more or less typical of American high schools.

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BOOK REVIEWS

Marching Tactics

By S. C. Staley. Cloth, 115 pages, illustrated. Price, $2. Published by A. S. Barnes & Co., New York City.

The literature on physical education has been growing with remarkable and most satisfying rapidity. During the past few years, a number of especially valuable books on special phases of the theory and practice of physical education have appeared. The present book is such a special volume and is intended, as its title indicates, to teach marching tactics such as will be needed and used by physical-education groups. The author has had in mind not only exhibitions of marching, but also the more necessary and commonplace marching tactics which are used in connection with games and various types of physical-education exhibitions. The work has been carefully developed from the author's own experience in teaching groups of young men and young women. He gives especial attention to the technic of teaching as well as to the exact directions for group maneuvers, drills, etc. The book is completely illustrated.

How to Get Ready or Citizenship

By Joseph Weintrob, Paper cover, 40 pages. Published by The Bruce Publishing Company, Milwaukee, Wis.

This book is intended for use in Americanization classes. The application for citizenship is instructed in the type of questions he will be called upon to answer. They relate to form of government, fundamental law, powers of the nation and state, Congress and the President, etc. Some leading historical facts regarding the nation are also provided. The alien desirous of becoming a citizen is also told how, when, and where, to file his petition for naturalization papers.

The quotas annually allowed to the several foreign countries for departure to America are stated. The important rulings and interpretations regarding "quota immigrants" made between July 1, 1924, and June 30, 1928, are given. Statistical information on the land areas and population of the several states is provided.

The publication will serve well as a textbook in Americanization classes. Those who seek information on the subject of naturalization find it a compact yet reasonably comprehensive work on the subject.

Detroit Advanced First-Grade Intelligence Test

By Harry J. Baker. Test Form A. Manual of directions and key. Published by World Book Co., Yonkers, N. Y.

This is a pictorial type test divided into seven parts. It is intended to test memory, ability to supply missing parts, the making of designs, general information, ability to read numbers, and ability to classify common objects. This test has been standardized.

The Story of Steady and Sure

By C. J. Hamilton. Cloth, 160 pages. Price, $1.50. Published by Thomas Y. Crowell Co., New York City, N. Y.

This is the interesting story of two white horses who became great circus favorites after a series of cruel adventures. Children will enjoy it.

Everyday Uses of the Alphabet

By Norman H. Hall. Paper. Price, 20 cents. Hall and McCreary Co., Chicago.

"Practical lessons in alphabetical arrangements" for teaching the sequence of letters.

Diabetic Manual for Patients

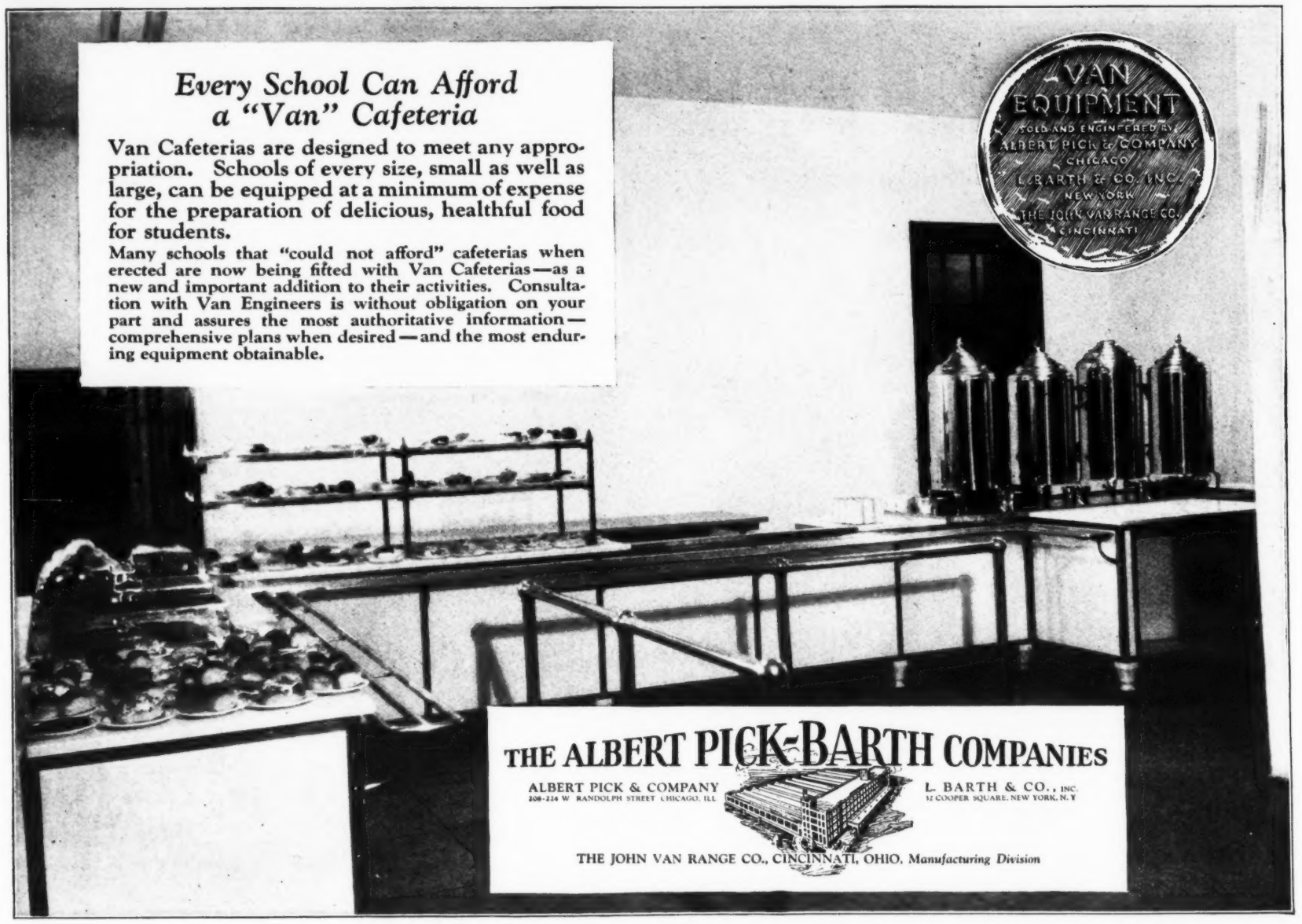
By H. J. John, M.D. Cloth, 8 vo., 202 pages. Price, $2. C. V. Mosley Co., St. Louis, Mo.

This book is addressed to the general reader, particularly the diabetic sufferer, and explains the nature, the cause, and the treatment of the disease. The viewpoint is distinctly optimistic, and the entire discussion and the suggestions should arouse confidence of the average case so he can lead a comfortable, normal life. The appendix outlines recipes for diabetic dishes and complete menus.

The Organization of Supervision.

Fred C. Ayer and A. S. Barr. Cloth, 398 pages. Published by D. Appleton and Co., New York City.

This book fulfills a valuable purpose in that it outlines for the first time and in detail the major facts, problems, and practices of the organization and administration of the supervisory forces of city schools. Quite naturally it begins with supervision in the large cities where supervisory leadership has been best developed, and takes up in de-



tail the nature and distribution of supervisory duties, the need and functions of special supervisors, and the relations of supervisors. An important section of the work describes the types of supervisory organization and gives the details of the best examples of the four or five effective types.

The book makes quite clear that the real problem of supervisory organization is in the small town and in the village where the small number of teachers to be supervised and the inability of the community to pay for supervision make the employment of effective supervisors difficult. The heads of these small school systems are either very young men of very limited experience or older men of limited capacity and less training. There is need for attacking the problem from the county-wide standpoint, and the state as a whole has a duty to perform in suggesting and organizing supervisory unions and recommending the employment of traveling supervisors at least for the special subjects. It would seem that the book is a bit conservative in limiting its discussion of the problem of the small town to effective situations found in several communities without recommending extensions of county or state supervisory functions.

By far the best chapter of the book summarizes the principles underlying the successful plans of supervision. The summary of this chapter tells the whole story of good supervision when it says that it must be characterized by (1) centralization of responsibility; (2) functional assignment duties; (3) facility for genuine cooperation; (4) integration of education processes and outcomes; (5) flexibility and constant adaptation to new situations and needs.

The book will do much to clear up conceptions of supervision and to direct study toward the improvement of supervisory relations.

Strayer-Upton Arithmetic

George Drayton Strayer and Clifford Brewster Upton. Higher Grade. Cloth, 426 pages. American Book Co., New York City.

This book provides a rather inclusive course for the seventh and eighth grades. The arrangement of topics follows very closely the recent recommendations of the National Committee on Mathematical Requirements. The problems emphasize very strongly home and farm situations and those simpler business transactions which young folks are likely to encounter. The authors have not forgotten that the book should offer some material that will make the transition from arithmetic to algebra and to geometry easy and natural.

By far the best feature of the book is the series of improvement tests and review problems which will enable the teacher to diagnose individual difficulties and shortcomings and apply remedial instruction.

Directive Study Sheets in American History

By Chas. C. Barnes. Paper, 128 pages. Price, 36 cents. Houghton Mifflin Co., Boston.

The twelve most important aspects or periods in our history have been here presented as study units to be handled by the laboratory method. Each unit is presented in the form of an introductory survey and a unit outline and is accompanied by three detailed outlines or lists of questions for study and investigation. Ample references are included to make the finding of facts and discussions relatively easy.

In the introductory study the author seems to overemphasize the effect of the crusades upon European life and to overlook the internal growth in all aspects of civilization during the later middle ages.

George Rogers Clark

By Ross F. Lockridge. Cloth, 210 pages. Price, $1.20. Published by World Book Company, Yonkers-on-Hudson, New York.

Of the many interesting and romantic figures of our revolutionary period, Clark, the conqueror of the British and of the Indians in the Northwest Territory, appeals strongly to boys and girls for his youthful daring and his exploits. The present book sticks closely to facts, it is vivid and stirring, and makes clear those widespread but closely related events in the old Northwest which took place during the years when the Colonial armies brought the Revolutionary War to a successful close and the Colonial governments were welded into the United States. The importance of Clark's services are not overstated but are rather conservatively set forth. His later life and the neglect and ingratitude from which he suffered do not make altogether pleasant reading.

The book fills a real need for more authentic biographies of our early heroes. It is a welcome contrast to impossible, romantic fiction with which children are fed.

Intelligence Tests

By Walter Fenno Dearborn. Cloth, 336 pages. Price, $2.50. Houghton Mifflin Co., Boston, Mass.

This book seeks to explain the significance of intelligence tests "for school and society" and to suggest how they may be used. The viewpoint of the author is as strongly deterministic as it has been in his earlier writings. He holds forth little hope for the improvement of intelligence over and above innate abilities. The only ray which penetrates the gloom is suggested in the fact that intellectual shortcomings as discovered by intelligence testers are special intellectual shortcomings which are mistaken for more general defects. The whole philosophy of the work promises little for democracy except a caste system for the fortunate intellectual groups. The improvable limits of memory, etc., are, in the author's belief, rather limited.

The Play Road to Health

By S. Weir Newmayer and E. C. Broome. Cloth, 144 pages. American Book Co., Chicago.

Health Habits

By S. Weir Newmayer and E. C. Broome. Cloth, 207 pages. American Book Co., Chicago.

"The Play Road to Health" dramatizes for the second and third grades a series of lessons on health habits, food selection, correct eating, outdoor play, cleanliness, etc. The situations indicate a keen insight into child interests and make full use of the love for play and dramatics to drive home the need, the habit, and the pleasure of good health.

"Health Habits" promotes correct habits by means of a series of stories adapted to silent and oral reading in the third and fourth grades. The range of habits inculcated is surprisingly inclusive, and the stories are amazingly clever in the situations and motives which they introduce. Each story is emphasized by a series of suggestions for class discussions, for the making of scrapbooks and for the preparation of posters. The book forms an easy transition to the more formal textbook study in the fifth grade.

Both books are cleverly illustrated in color and black and white.

(Continued on Page 148)

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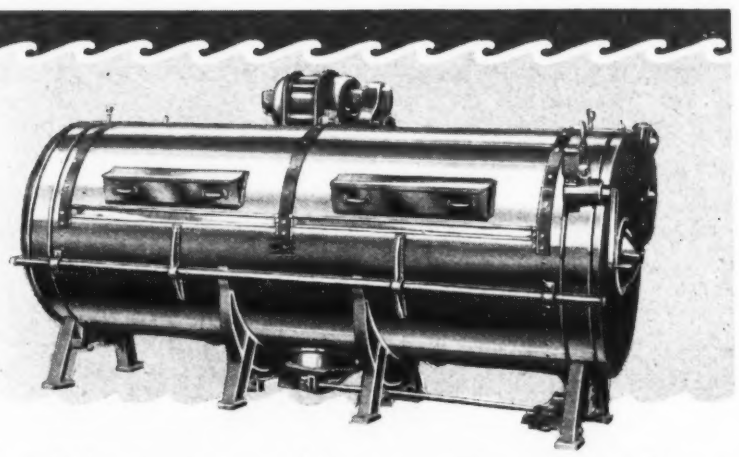
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(Continued from Page 146)

Kitchen Management

By J. O. Dahl. Cloth, 370 pages, illustrated. Price, $5. Harper & Brothers, New York City.

The cafeteria has become an integral part of the high school. Whenever it is properly organized and operated, the cafeteria contributes materially to the health and comfort of pupils and teachers and is directly a factor in the educational efficiency of the school. Unlike other departments, it is not an expense to the community beyond the first cost for space and equipment, but, if it is well managed, it is self-sustaining or even slightly profitable.

It is conservate to estimate that the original cost of building space, equipment, and furniture in all high-school cafeterias approaches seventy-five millions of dollars. The total annual sales of these cafeterias is impossible to estimate, and statistics are entirely lacking, but it is quite easy to underderstand that the correct planning, construction, equipment and management of the kitchens are of extreme importance. If the author of the present book is correct in saying that five sixths of all quantity kitchens built in the last five years are operated with excessive overhead due to errors in design, construction, and equipment, the value of a book like the present is made clear.

The author, who has been a consulting expert in the design of institutional and hotel kitchens, explains in this book the principles and practices of designing and equipping quantity kitchens. He takes up every phase of kitchen design, construction, and administration in a clear, readable style. The ideal kitchen for varying situations is described, with numerous illustrations which show how and why it is economical of time and money. Floor-plan sketches give examples of various types of quantity kitchens, and the different departments that make them complete.

Beginning with a thorough discussion of construction materials, Mr. Dahl goes on to a study of every phase of equipment—buying, placement, and operation. He answer such questions as: how to judge values, determining sizes and styles, cost of operation and care of machines, cleaning and upkeep, fuel costs, etc. The construction, equipment, organization and management of storerooms; bakeries, butcher shops, pantries, and dishwashing departments are handled fully, and two badly neglected subjects, ventilation and refrigeration, are made understandable. It is to be regretted that a separate chapter has not been introduced to discuss the especial problem of the small and medium size school cafeteria, the kitchen of which must be equipped from the standpoint of a minimum expenditure for serving one daily meal of rather limited type.

Several chapters take up efficient organization of the chef's and steward's department. Each job is analyzed and the duties outlined for every position. There is also a compact chapter with numerous illustrations covering the subject of making profitable menus. This, together with the mass of material on efficient buying, is of especial value. Here again the especial problems of the average high-school cafeteria would warrant an additional chapter.

As in all recent discussions of building equipment, the book stresses standardization. The author makes a strong case for standardizing not only kitchen sizes and major items of equipment but also recipes, portions, dishes, silver, and down the line to cleaning materials and food products. There is no doubt but that these principles properly applied will save immense sums. The appendices list standards for food portions and china sizes.

Business managers and superintendents of schools may well add this book to the school-board-office reference library. Architects and supervisors of cafeterias will find it invaluable.

Home Economics Home Project Record Book

By Jessie W. Harris. Paper, 28 pages. Price, 25 cents. Published by Houghton Mifflin Co., Boston, Mass.

This record book has been designed by the author as a help in the supervision of home practice and home project work. The use of the book makes the work systematic. It makes possible an evaluation of homework in terms of school credit and will be found equally satisfactory for all classes in home-economics work.

The book contains space for checking foods, care of clothing, home planning, and household management, home nursing and child care, together with space for a statement of the project plan of the pupil. Some space is allowed for the signature of the parent or guardian.

A Teachers' Manual in the Use of the Educational Scales

M. J. Van Wagenen. Paper, 276 pages. Price, $1.50, postpaid. The Public School Publishing Company, Bloomington, Ill.

Two features of this book appeal: The author makes no extravagant claims for standard educational tests, but describes them in detail and outlines their uses. To make clear the actual process of giving and scoring tests, a series of specimen tests in the important subjects is provided and the scoring is carefully discussed.

The Book of Famous Rulers

By Lydia Hoyt Farmer. Cloth, 431 pages. Thos. Y. Crowell & Co., New York, N. Y.

This is a reissue of a book first published in 1886. The author is not without strong prejudices, so that the book lacks the fine impartiality for peoples, historic individuals, religious, etc., which we have become accustomed to find in books for supplementary reading.

The Measurement of Socio-Economic Status

By Verner M. Sims. Paper, 32 pages. Price, 50 cents. Public School Publishing Co., Bloomington, Ill.

This study seeks to determine a basis for judging the social and economic worth of families and individuals by means of a rating scale touching 47 distinct points. It would be interesting to carry the study a step or two further to determine how far socio-economic status correlates with attention to civic and moral duties and with religious and moral character.

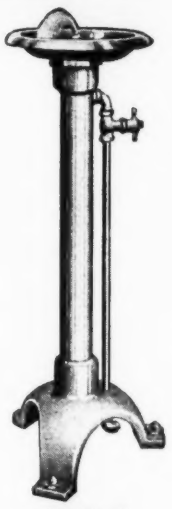
Tests and Measurements in High-School Instruction

By G. M. Ruch and G. D. Stoddard. Cloth, 388 pages. Price, $2.20. World Book Co., Yonkers, N. Y.

This book presents a practical summary of the general problem of tests and testing in senior and junior high schools and affords for the high-school instructor and principal a clear-cut series of descriptions of tests in the important secondary-school subjects. Perhaps the most important part of the book, is that devoted to a discussion of informal objective examination methods. The final division of the book outlines from the standpoint of the testmaker, the principles and procedure, especially in preparing tests, validating them, and standardizing them.

The chief value of the book undoubtedly lies in the fact that it presents in one easily accessible volume, the best current information on tests for secondary schools. The practical principal and the

(Concluded on Page 151)



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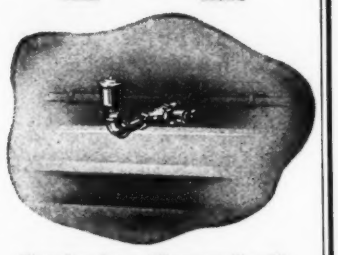
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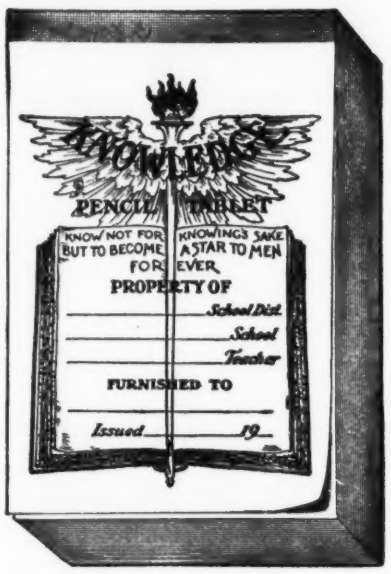
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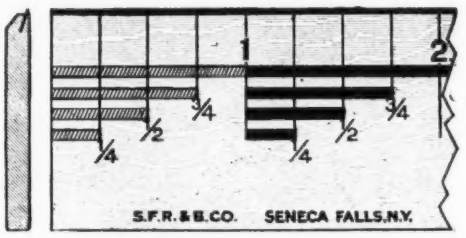
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(Concluded from Page 148)

experienced teacher will undoubtedly take many of the various statements with some reservation and will continue to classify students, and pass judgment on individuals, in the light of their own intimate knowledge of the student and of their own experience.

The Pathway to Reading

Eighth reader. By Bessie Blackstone Coleman, Willis L. Uhl, and James F. Hosic. Cloth, 432 pages. Published by Silver, Burdett & Co., New York.

In compiling this book, the editors have taken into account not only the necessity of providing a rich variety of interesting literary material, but they have also remembered that vocational interests are strong in children who are completing the grades. In the present book, there is a great deal of entirely new material chosen from current literature. The older classics, also, have not been forgotten. Each section of the book is followed by a series of questions and problems intended to develop the power of serious reading.

The editors have slipped a bit in including without considerable editing, an extract from an address of Franklin K. Lane on education and Americanization. The plea for a congressional appropriation to banish illiteracy may have been proper at the time the address was written, but it might have been eliminated without destroying in any way the sense of the whole selection.

INDEX OF SCHOOL-BOND PRICES

(Concluded from Page 66)

Commercial bonds have fallen in price, which, of course, means a higher yield. As will be seen, the average yield of sixty high-grade commercial and industrial bonds is only .08 of one per cent higher than our index of school-bond yields.

Table VI shows that commodity prices show some tendency to rise over the past two or three months. This is especially true of the prices of building materials.

DEATH OF MRS. MAIDA GREGG

Mrs. Maida Gregg, wife of John Robert Gregg, and vice-president of the Gregg Publishing Company, died at London, England, on June 28, following an attack of pneumonia.

Mrs. Gregg was born in Missouri and was married to Mr. Gregg in 1899 at Chicago, where they lived for nine years. With the establishment of the New York office of the firm, Mr. and Mrs. Gregg moved to New York where they had since resided. With the purchase of a chain of schools and the formation of a branch in England, it became necessary to spend about five months of every year in London.

Mrs. Gregg had maintained an active part in the affairs of the company for many years and her keen business ability was recognized by those with whom she came in contact. The funeral service for Mrs. Gregg was held on July 12, in New York City.

THE PROGRESS OF HIGH SCHOOLS IN NORTH CAROLINA

—The North Carolina Department of Public Instruction has issued a report in which it shows that the high schools of the state have made a remarkable growth since 1910. In 1910-11 there were 12,470 students enrolled, while the enrollment for 1925-26 reached 89,469, including white and colored, urban and rural, public and private schools. An increase of 76,999 students, or 618 per cent, in 15 years, is the remarkable record which has been attained. In 1910-11 only 2.3 per cent of the total enrollment was in high school, while in 1925-26 eleven per cent of the enrollment was found in the four upper grades.

The report shows that the number of graduates during this decade and a half rose from 510 to 11,352. At the close of the session of 1925-26 there were 543 accredited high schools, with an average of over five for every county in the state. Of the 543 high schools, 479 were public and 64 private. Of the 479 public high schools there were 453 white and 26 colored.

SCHOOL-BOND SALES AND SCHOOLHOUSE-CONSTRUCTION CONTRACTS FOR 1925-1928

Month	1925			1926			1927			1928		
	School-Bond Sales[1]	CONTRACTS LET[2]		School-Bond Sales[1]	CONTRACTS LET[2]		School-Bond Sales[1]	CONTRACTS LET[2]		School-Bond Sales[1]	CONTRACTS LET[2]	
		Sq. Feet	Value		Sq. Feet	Value		Sq. Feet	Value		Sq. Feet	Value
Jan.	$ 28,931,323	2,034,000	$ 13,595,000	$ 54,022,531	2,245,200	$ 13,346,200	$27,028,616	2,376,000	$ 17,012,500	$ 16,275,161	3,498,100	$ 23,369,400
Feb.	30,761,773	3,322,000	17,772,000	49,014,450	3,114,200	20,721,500	18,501,650	3,009,800	22,045,400	20,952,450	3,157,400	18,650'500
March	22,468,500	5,209,000	40,541,000	16,265,292	4,00,100	29,079,700	30,906,289	5,997,800	36,521,800	19,995,366	5,316,300	33,881,000
April	25,305,540	4,762,000	30,972,000	25,982,876	5,094,500	38,480,200	19,825,233	4,808,300	35,678,100	34,182,611	5,124,500	31,985,400
May	108,375,192	4,079,000	25,775,000	34,431,553	6,610,500	39,709,700	44,210,460	5,346,900	34,545,100	28,562,340	7,160,500	46,851,000
June	28,901,150	9,001,800	64,584,800	25,329,245	6,015,600	40,753,400	23,083,337	5,675,600	42,121,800	16,591,771	7,390,400	46,134,600
July	24,196,675	7,644,500	57,672,000	28,918,050	6,067,900	42,015,800	23,635,536	5,466,300	36,433,600	22,057,340	5,904,700	36,926,400
Aug.	21,588,754	5,246,200	33,667,200	17,970,298	5,469,000	42,124,000	16,997,680	5,937,800	41,035,200	.....	.....	.....
Sept.	25,655,944	4,744,100	35,217,300	12,874,224	4,865,100	34,531,600	30,869,480	4,263,700	29,243,700	.....	.....	.....
Oct.	26,313,830	3,936,800	28,192,000	19,191,266	3,516,600	23,556,700	26,053,600	4,171,200	30,169,600	.....	.....	.....
Nov.	24,673,250	3,156,700	22,048,100	17,385,423	4,711,500	34,571,800	26,898,416	4,684,900	31,741,300	.....	.....	.....
Dec.	30,098,325	3,407,400	31,645,500	30,605,382	2,854,500	22,177,600	28,168,175	3,736,200	33,247,600	.....	.....	.....
Totals	$397,270,256	58,799,900	$423,203,700	$332,800,590	54,564,700	$381,078,200	$316,178,472	55,474,500	$379,795,700	$158,617,039	37,551,900	$237,798,300

[1]Advertised School-Bond Sales.
[2]Dodge Figures.
NOTE: According to revised information, we have made a slight change in the figures for April "Square Feet" and May "Value" under Contracts Let.

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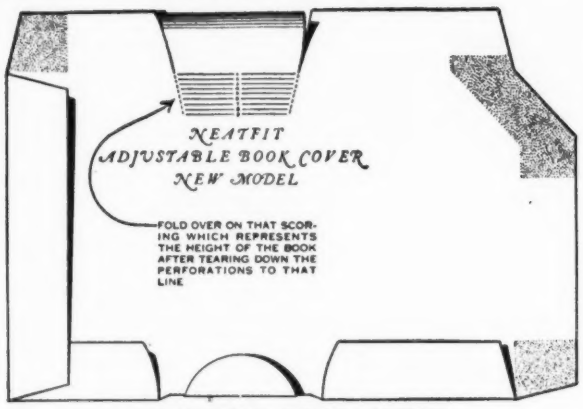
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FOR TEXTBOOKS

In comparison with the national average for 1923-24, the distribution of pupils in the public high schools for white pupils appears quite favorable. The figures are as follows:

	United States	*North Carolina*
First year	39.2	37.5
Second year	27.1	27.0
Third year	19.2	20.1
Fourth year	14.5	15.4

In 1915-16 only about one pupil out of six entering high school in North Carolina graduated four years later, while in 1925-26 about one half of those entering finished. Approximately three times as many pupils were graduated from high school in 1925-26 than was the case a decade ago.

In the state as a whole, thirteen out of every 100 pupils are enrolled in high school, or an increase of one per cent over the previous session. The rural schools, with 10.3 per cent in high school, show a gain of 1.3 per cent over the session of 1924-25, while the city group made an increase of .2 of one per cent. In the matter of per cent of enrollment, 84.2 per cent of the pupils enrolled this year attended daily, which is 1.2 per cent more than for the session of 1924-25. Brunswick county, with a percentage of attendance of 92.2 led the rural systems, while Kinston, with a percentage of 95.9, was ahead among the city groups. Northampton county, in attendance, enrollment, and scholarship had the best composite rank of any of the counties. while Graham county had the lowest rank.

The extensive consolidation program achieved in North Carolina has led to an increase in the number of school buses and in the number of children transported. In 1914-15, six vehicles were used to transport 247 pupils to and from consolidated schools. In 1919-20 the number of vehicles had increased to 150, and 7,936 children were being transported. By 1925-26, North Carolina owned 2,317 trucks to transport 87,000 children. During the six-year period, 1919-20, through 1925-26, the number of children transported increased from 7,936 to 87,283. The 2,317 buses covered 51,869 miles of route, and transported more than 87,000 children. The cost of transportation during the year 1925-26 was $1,302,720.

In 1925-26, 696 consolidated schools for whites and 119 schools for negroes were maintained. Wilson county ranks first, and Stanley second, in the number of children transported and in the number of trucks used. In the former, a total of 2,735 children are transported in 77 trucks, which register a daily mileage of 1,499 miles.

INTERNAL ACCOUNTING AT SACRAMENTO, CALIFORNIA

Mr. Ben T. Thomas, auditor of the city-school department of Sacramento, Calif., recently described the system of internal accounting for student funds in operation in the schools of that city.

Prior to the establishment of the office of school auditor, the plan of accounting for student funds was similar to that in operation in nearly all other school departments. Students raised money, or realized money from their school affairs, and were accountable to some member of the faculty. In this way the money was scattered throughout the department and lax methods of checking and financing crept into the accounting. The complexity of the task may be seen when it is stated that forty different student or school-activity funds were in operation

The first work to be accomplished in the direction of reorganizing the work was to transfer all the funds to one account and to make all funds accountable to one centralized head. Under the plan of central control all the money handled by students passes through the office of the school auditor. This office is the central office for receiving and checking all money collected by students for their various activities which each year amounts to approximately $100,000, and which includes class funds, entertainments, milk fund, and cafeteria, as well as other functions where money is raised. The milk fund, alone, last year netted $12,000.

The office is self-supporting at the present time. Every cent raised by students is accountable to the school auditor, and he knows to a cent the amount of money raised by the students among themselves, where the money is spent, and other details. The result is that the auditor is in position to place money in the bank, to draw interest in favor of student-body activities. The money is placed in a revolving fund; and when the money is not working, it is placed in a savings account.

The entire system is based on sound business principles and is carried on much the same as any well-balanced educational organization. As a result of the improved business methods, the work has grown to such an extent that a bank has been organized in the high school, with tellers named from the student body, and working under the supervision of Mr. Alfred Bird.

INDIANA LAW ON SCHOOL VENTILATION

The Indiana law requires that 225 cu. ft. of space be provided for each pupil in a schoolroom; that ventilation be provided furnishing 1,800 cu. ft. of air each hour for 225 cu. ft. of space; that heating systems shall provide a temperature of 70 deg. while maintaining a relative humidity of 40 per cent.

Indianapolis engineers are in doubt whether these requirements are humanly possible. Outside temperature, direction and velocity of wind, humidity, loss of heat, all varying from day to day, are elements making it difficult, if not impossible, to meet all the requirements.

Dr. William F. King, secretary of the state board of health, charged with inspection of ventilating systems in the schools, and enforcement of the sanitary schoolhouse law, reminded the engineers that if a change is sought in the measure it should be with due regard for conditions throughout the state.

"In larger cities, such as Indianapolis, it is necessary to protect children more closely against impure air," he said, "than in smaller cities and rural communities, where the air is relatively free from impurities. It would be folly to compel installation of air washers in smaller places at a heavy financial burden. Shortage of funds would prevent installation in 75 per cent of the schools in the state."

NEWS OF SCHOOL OFFICIALS

—Mr. N. F. Maddever has been reelected as president, and Mr. F. J. Pfetsch as clerk, of the board of education at Niagara Falls, N. Y.

—Mr. C. C. Miles, formerly superintendent of schools at Salisbury, Mo., has been elected head of the school system at Braymer, to succeed Mr. W. R. Lowry. Mr. Miles has been in attendance at the University of Missouri during the past year where he completed his graduate work leading to a master's degree.

—Mr. W. R. Lowry, formerly of Braymer, Mo., has been elected superintendent of schools at Chester, Ill.

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San Francisco—Rational Typewriting

On June 26 the San Francisco Board of Education adopted the New Rational Typewriting, 1927 edition, for exclusive use in all the senior high schools of that city.

Des Moines—Rational Typewriting and Rational Typewriting Projects

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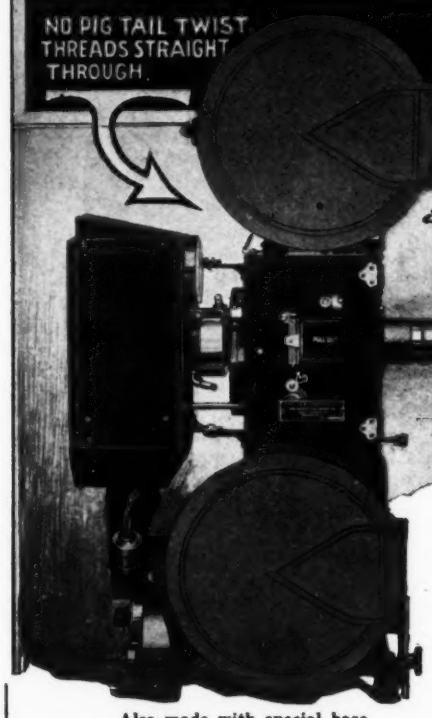
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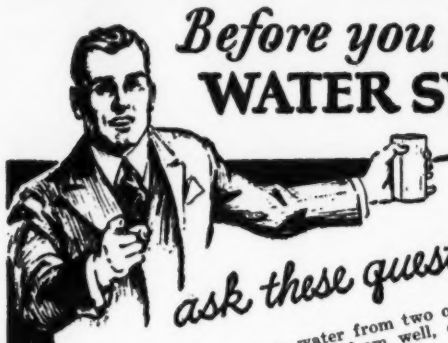
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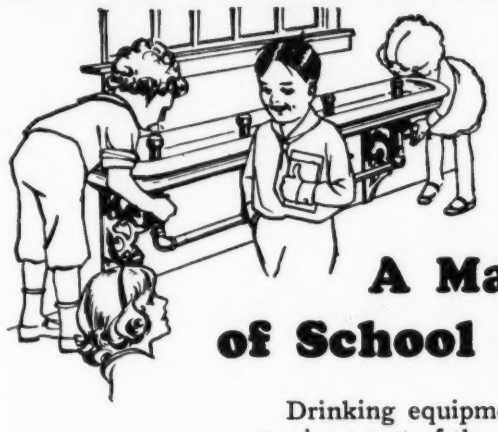
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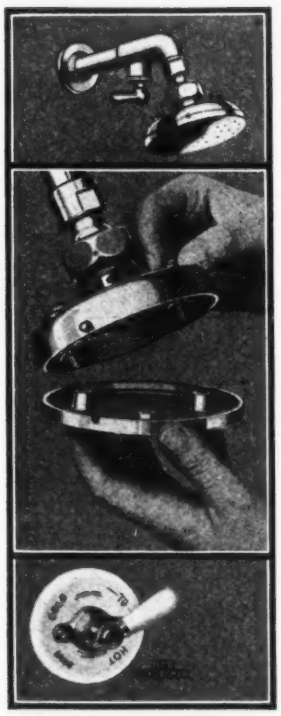
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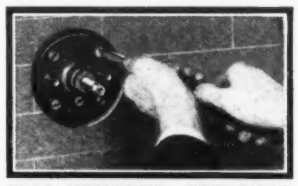
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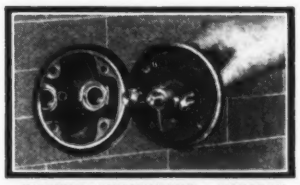
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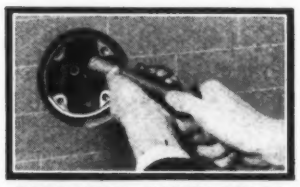




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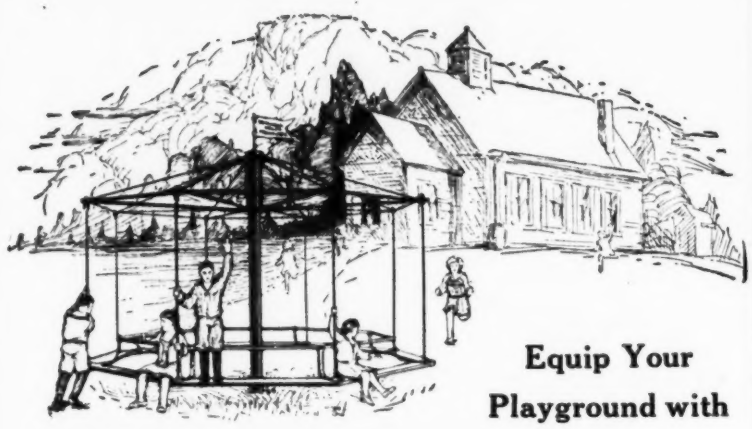
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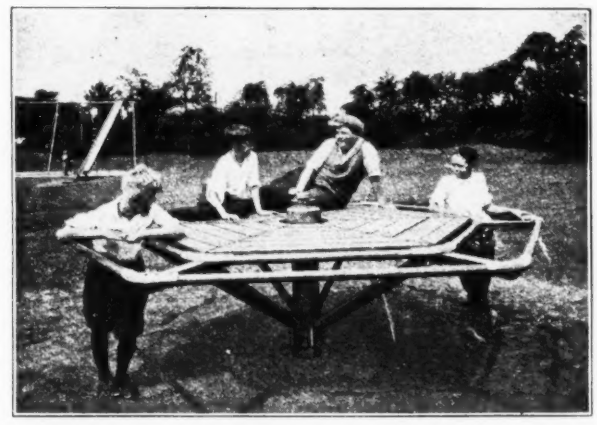
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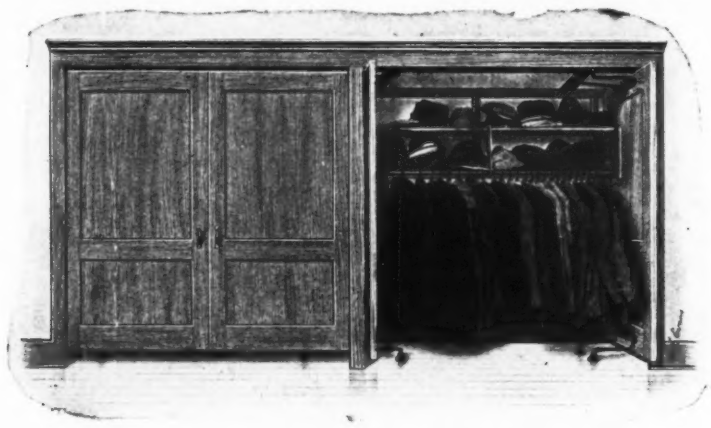
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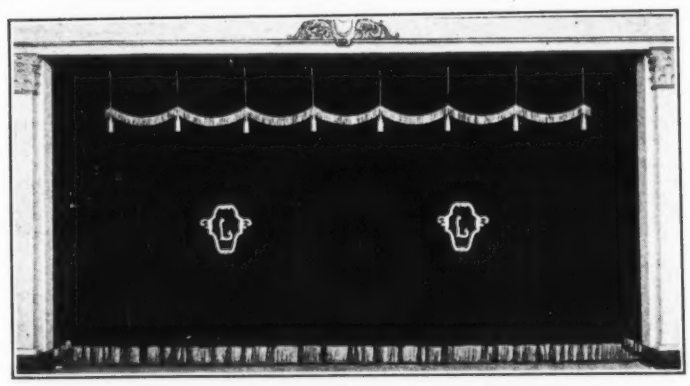
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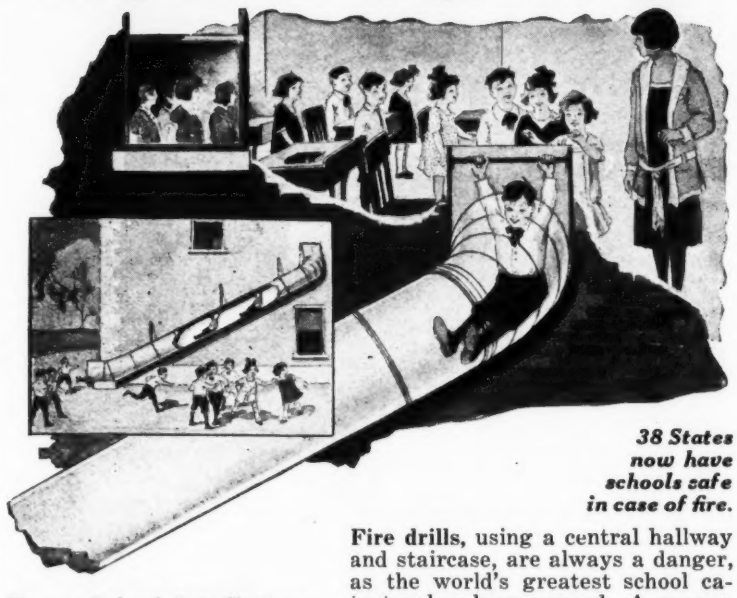
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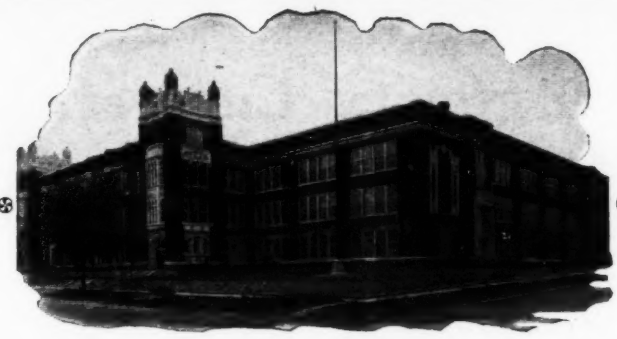
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When the new Theodore Roosevelt Junior High School, Rockford, Ill., was completed recently it was proclaimed one of the finest school buildings in the state.

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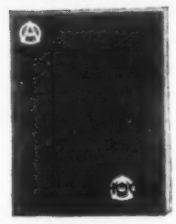
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Dougherty Cafeterias

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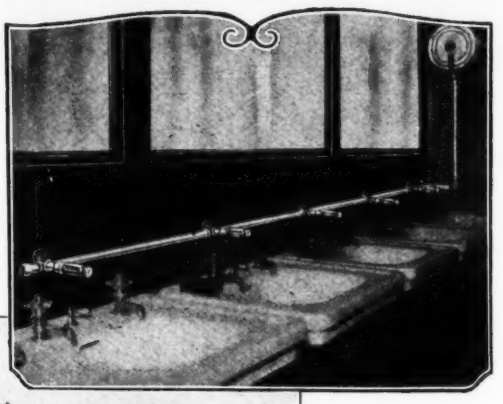
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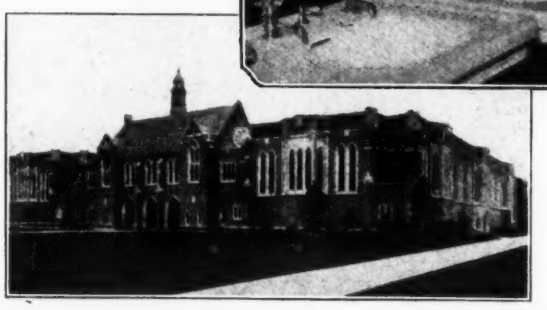
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DISHWASHING MACHINES

It is an accurate summary of what is happening in all parts of the country wherever superior performance and the greatest dollar-for-dollar value are the overriding influences in the selection of dishwashing equipment for cafeterias, clubs, hospitals, hotels and restaurants.

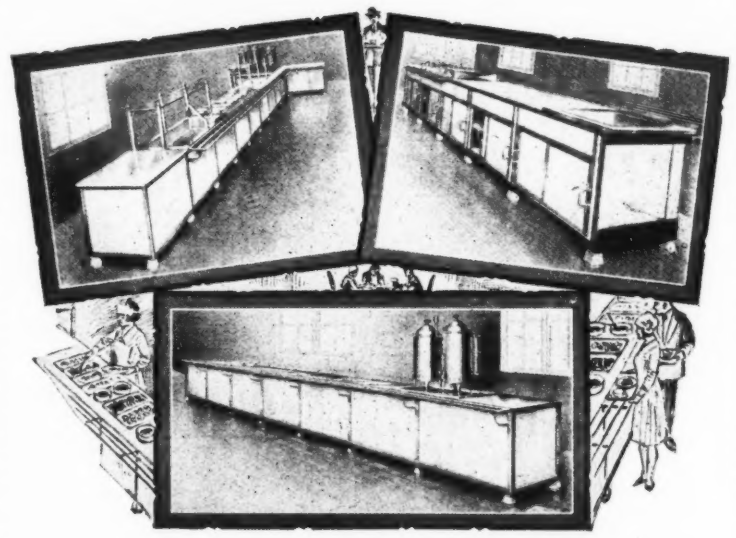
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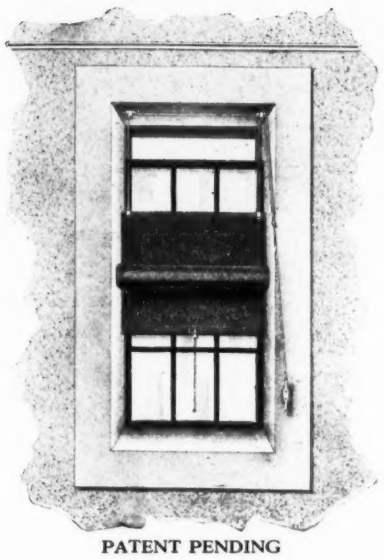
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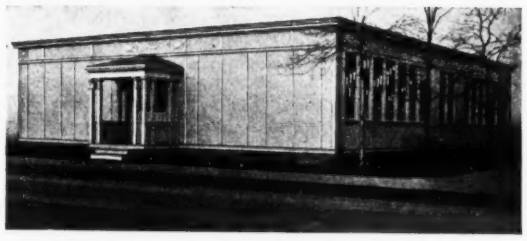
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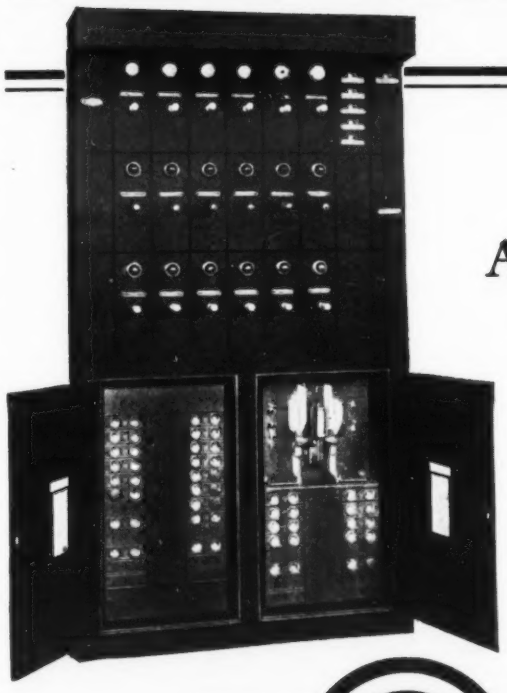
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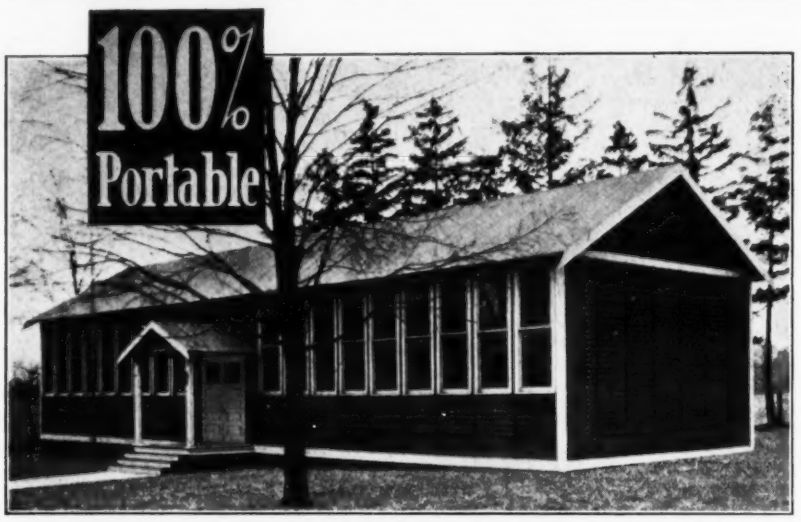
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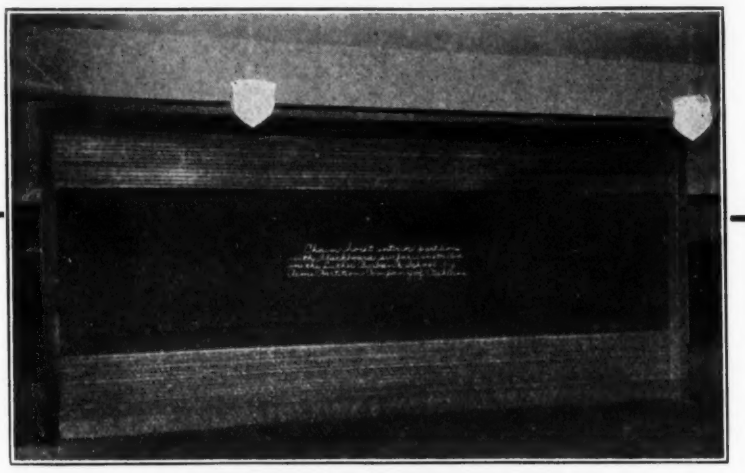
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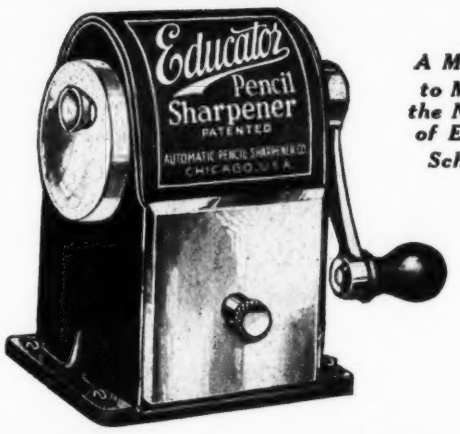
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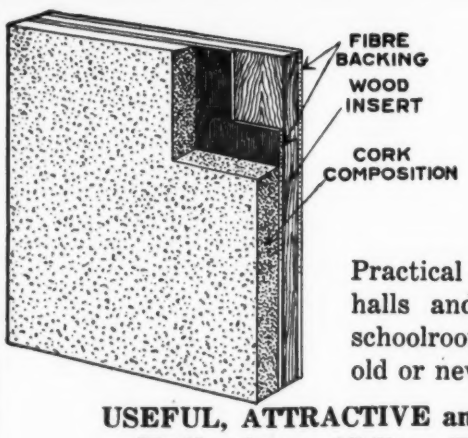
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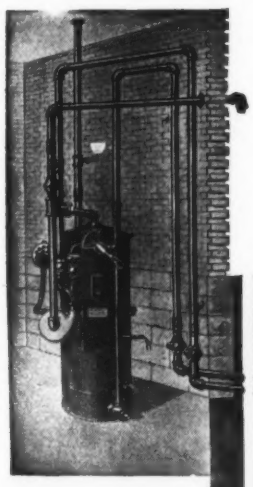
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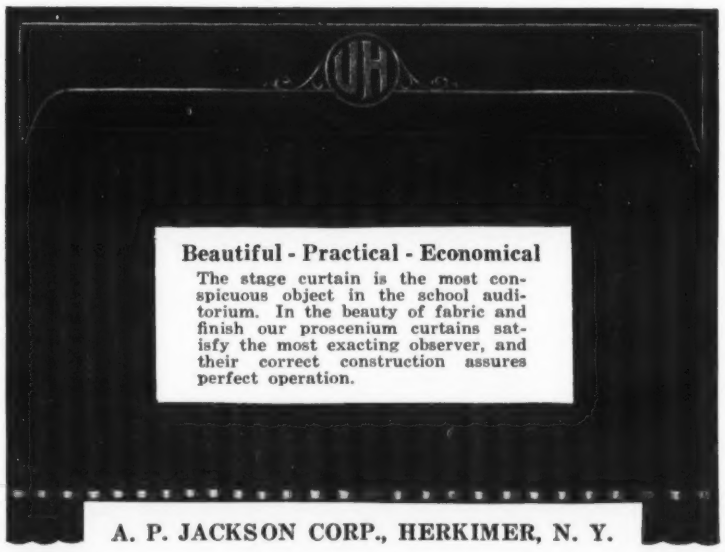


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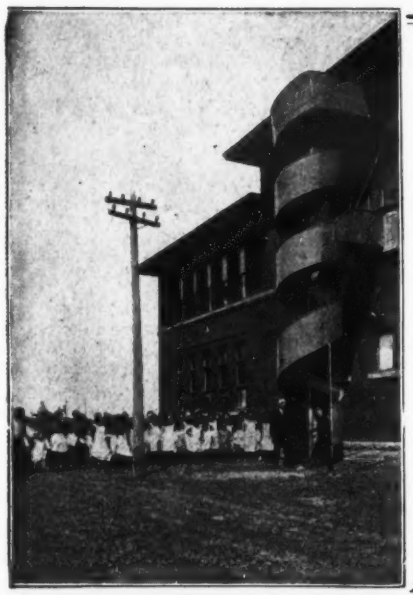
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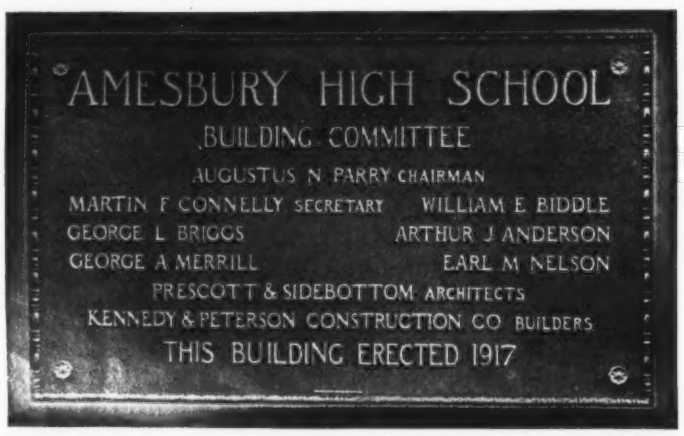
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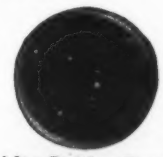
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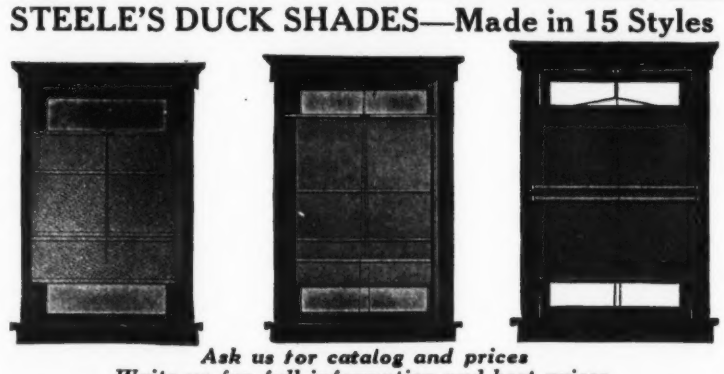
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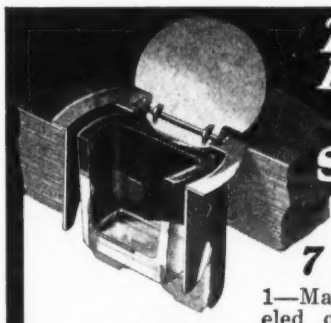


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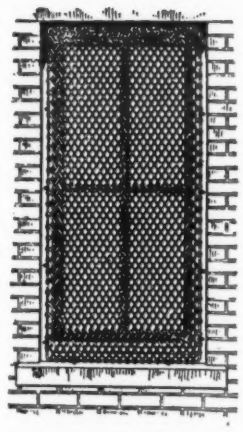
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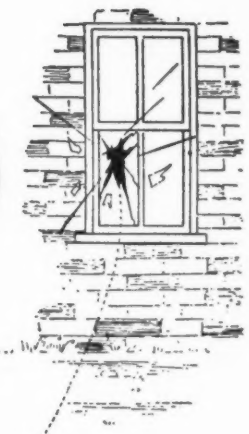
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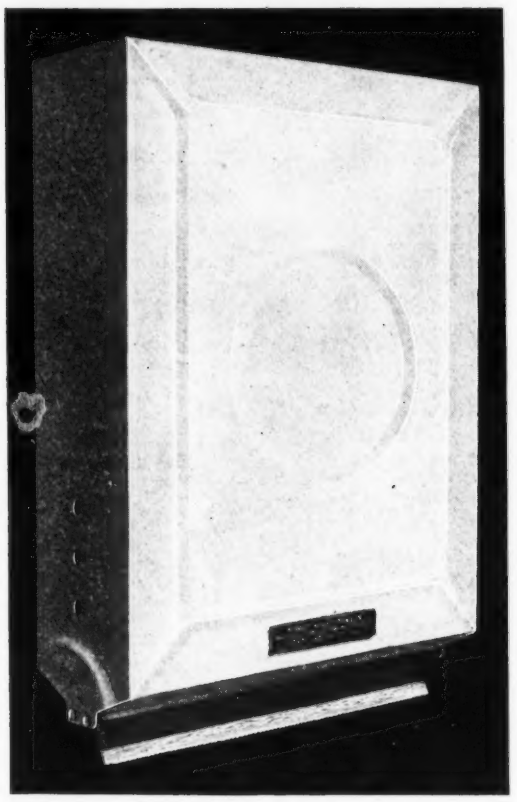
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To the user, Nibrocs promote health. Each towel is individually served from a white enameled, dust proof, steel cabinet, one at a time. Nibrocs are good to the most sensitive skin, as they are free from any injurious chemicals.

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School Board Journal

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The names given below are those of the leading and most reliable Manufacturers, Publishers and Dealers in the United States. None other can receive a place in this Directory. Everything required in or about a schoolhouse may be secured promptly and at the lowest market price by ordering from these Firms.

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- **Hoffmann & Billings Mfg. Co.**
- **Nelson Mfg. Company, N. O.**
- **Rundle-Spence Mfg. Company**
- **Vogel Company, Joseph A.**

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- Detroit Atlas Portable Bleacher Co.

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- **Clarke Sanding Machine Company**

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- **American Portable House Co.**
- **Armstrong Company, The**
- **Asbestos Buildings Co.**
- **Circle A Products Corporation**
- Harris Brothers Company
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PROJECTION LANTERNS
- **Spencer Lens Co.**
- Trans-Lux Daylight Picture Screen Corp.

PROJECTORS
- **Bausch & Lomb Optical Co.**
- **Holmes Projector Company**
- International Projector Corp.

PUBLIC ADDRESS SYSTEMS
- Graybar Electric Co., Inc.

RANGES
- **Cleveland Range Company, The**

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- **Berger Manufacturing Company**

RECORD SYSTEMS
- Remington Rand Bus. Service, Inc.

ROLLING PARTITIONS
- **Acme Partition Company**
- **Wilson Corp., Jas. G.**

ROOFING
- Barrett Company, The

RULERS
- Seneca Falls Rule & Block Co.

SANDERS
- Clarke Sanding Machine Company

SAFETY STAIR TREADS
- **American Abrasive Metals Co.**
- Safety Stair Tread Co., The

SASH OPERATING DEVICES, Steel
- David Lupton's Sons Co.
- **Detroit Steel Products Company**

SASH, STEEL
- **Detroit Steel Products Company**
- **Lupton's Sons Co., David**

SASH, VENTILATING
- **Detroit Steel Products Company**

SCENERY
- Windowcraft Drapery Co.

SCIENTIFIC APPARATUS
- **Rowles Co., E. W. A.**
- **Standard Electric Time Company**
- Welch Manufacturing Co., W. M.

SCREENS—PICTURE
- Trans-Lux Daylight Picture Screen Corp.

SCRUBBING EQUIPMENT
- **Continental Chemical Corporation**
- **Finnell System, The**

SHOWERS
- **Clow & Sons, James B.**
- **Hoffmann & Billings Mfg. Co.**

SKYLIGHTS—METAL
- **Lupton's Sons Co., David**

SLATED CLOTH
- **Beckley-Cardy Company**
- **N. Y. Silicate Book Slate Co.**
- **Weber Costello Company**

SOAP DISPENSING EQUIPMENT
- Palmer Products, Inc.
- U. S. Sanitary Specialties Corp.

SOAP—LIQUID
- U. S. Sanitary Specialties Corp.

SPRAY PAINTING EQUIPMENT
- **Vortex Mfg. Co.**
- **DeVilbiss Mfg. Co., The**

STAFF LINERS
- **Weber Costello Company**

STAGE CURTAINS, EQUIPMENT AND SCENERY
- **Acme Scenic Studios**
- **Beck & Sons Co., The Wm.**
- **Kansas City Scenic Co.**
- **Lee Lash Studios**
- **Novelty Scenic Studios**
- **Tiffin Scenic Studios**
- **Twin City Scenic Company**
- **Universal Scenic Studios, Inc.**

STAGE EQUIPMENT
- Windowcraft Drapery Co.

STAIR TREADS
- **Alberene Stone Company**
- **American Abrasive Metals Co.**
- American Blue Stone Company
- **Norton Company**
- **Safety Stair Tread Co., The**

STATIONERS
- **Blair Company, J. C.**

STEEL JOISTS
- **Truscon Steel Company**

STEEL SASHES
- **Detroit Steel Products Company**

STEEL STORAGE CABINETS
- **Durabilt Steel Locker Co.**
- **Durand Steel Locker Company**
- **Medart Mfg. Co., Fred**

STEEL WINDOWS
- **Detroit Steel Products Company**
- **Lupton's Sons Co., David**

TABLES
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- Institutional Supply Co., Inc.
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- Remington Rand Bus. Service, Inc.
- Rineheimer Bros. Mfg. Co.

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- Standard Electric Time Company

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- **Buffalo Forge Company**
- **Johnson Service Company**

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- Weldon Williams & Lick

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- **A. P. W. Paper Company**
- **National Paper Products Co.**
- Palmer Products, Inc.
- U. S. Sanitary Specialties Corp.

TOWELS
- **A. P. W. Paper Company**
- **Bay West Paper Company**
- **Brown Company**
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- U. S. Sanitary Specialties Corp.

TOILET PARTITIONS
- **Clow & Sons, James B.**
- **Litterer Bros. Mfg. Company**
- Mills Company, The
- **Sanymetal Products Company**
- **Structural Slate Company**
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TYPEWRITERS
- Remington Rand Bus. Service, Inc.
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VACUUM CLEANING SYSTEMS
- Spencer Turbine Company, The
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- **Nash Engineering Company**

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- Buffalo Forge Company
- Dunham Company, C. A.
- Nelson Corp., The Herman
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- Sturtevant Company, B. F.

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- Globe Ventilator Company
- Lupton's Sons Co., David

VOCATIONAL EQUIPMENT
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- Wallace & Tiernan, Inc.

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- **Mutschler Brothers Company**
- **Detroit Steel Products Company**
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- **Truscon Steel Company**
- **Universal Window Company**
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- **Williams Pivot Sash Company**

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- **American Fence Construction Co.**
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- **Austral Window Company**
- Detroit Steel Products Company
- David Lupton's Sons Co.
- Williams Pivot Sash Company

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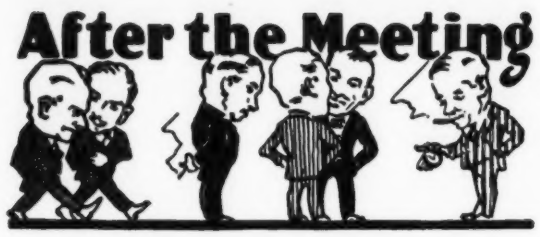
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Information Given Out

Mr. J. R. Allen, superintendent of schools, Pine Bluff, Arkansas, contributes a story he heard recently. It reminds me of a city superintendent who always had a good teaching staff. Some of his brother superintendents often asked him where he got his teachers. He always told them that that would be a dangerous procedure to tell them for they would rob him of his source.

An elder invited the parson to a goose dinner. "See heah, Elder, dot's a mighty fine goose. Whar did yo' git 'em?"

"See heah, pawson, when yo' preaches a real fine sermin, I never axes you whar you got it."

"Don't Do Nothing"

Mr. R. C. Hall, superintendent of schools, Little Rock, Arkansas, tells a joke about Mr. McAndrew of Chicago that is really a joke on Hall. Most boys feel the same about school superintendents in those years before the 'teens.

The superintendent was taking Mr. McAndrew of Chicago for a ride. He had a flat, so while waiting for a service car, McAndrew engaged in conversation with two colored boys who evidently were playing truant.

"Do you know that gentleman?" asked McAndrew.

"Yes, sah, Boss, we sure do," replied the boys.

"Who is he?" asked McAndrew.

"He is Superintendent Hall."

"And what does he do?" asked McAndrew.

"He don't do nothin'," replied the boys.

Detours in Thinking

Miss Katherine Craig, state superintendent of public instruction, Denver, Colorado, tells a story, for which she claims no originality, but offers it because of the many wrong ideas that students get. Some students are always going to the certain objective in the most round-about way full of detours and pitfalls. This youth that Miss Craig tells about is a horrible example of the circuitous thinking.

Professor—"Will some student please give me the formula for water?"

Student—"H I J K L M N O."

Professor—"Where in the world did you learn that?"

Student—"You told us yesterday that it was H to O (H_2O)."

A Clever Introduction

Mr. W. C. Griggs, superintendent of schools for Mobile county, Alabama, offers a very fine bit of pleasantry for an introduction to a speech. It will put the audience in good humor and will serve also as an apology for a poor speech.

Just a few days ago, a gentleman addressing a Mobile audience that was in a very fine humor, was applauded as he arose to speak. He said, "When you applaud me at the beginning of my talk it is faith; if you applaud after I have begun, it is hope; if after I have finished, it is charity."

Why Jokes Fall Flat

Mr. W. S. Cawthorn, state superintendent of schools, Florida, states that he has no joke but one paragraph of his letter is well worth publishing for it strikes a truth. So often we tell jokes that fall flat. In most cases we blame our listeners but really it might be the type of jokes. Here's his paragraph:

"Now and then I attempt a joke, but it generally turns out like those that Sidney Smith, English writer, describes as impossible to get into a Scotchman's head except by means of a surgical operation. John Stuart Blackie, a Scotch professor of the University of Edinburgh, replied with the statement that Smith referred to English jokes."

Sincere Praise

W. D. F. Snipes, superintendent of schools, Tampa, Florida, tells a story of a sincere bit of praise accorded a preacher by an illiterate but wise colored man who thought what you are, counts for more than what you look like you are. Here's the story:

A minister was walking down the street when he was halted by a negro man. "Say Mr. ————, I has known you three years and has known you was a preacher. I heard some white folks talking about you. They say you are just about the best preacher in town. Yes sir, they would just as soon hear you lecture as hear these other fellows preach."

After being thanked by the minister, the negro remarked, "you know you can generally look on the outside and tell what is on the inside, but I shure never expected that of you."

BUYERS NEWS

ISSUE STEEL-DOOR CATALOG

Under the title of "Truscon Copper-Alloy Steel Doors," the Truscon Steel Company of Youngstown, Ohio, has just published a complete catalog of its entire line of metal doors. The line ranges from the smallest, simplest hinge type of stop doors to the largest, elaborate airplane-hanger doors. Between the two extremes, the catalog illustrates and describes a vast variety of useful doors for buildings of all types, particularly for industrial and commercial establishments. School architects will find the catalog valuable because of the necessity for steel doors in the several departments of school buildings, school shops, school garages, etc. The catalog includes as a special feature, accurate detailed drawings.

Copies will be sent to anyone who requests Catalog No. 110, 1928.

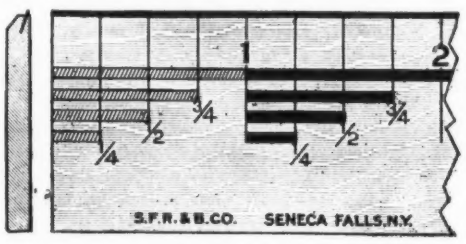
BAUSCH & LOMB OBSERVE SEVENTY-FIFTH ANNIVERSARY

The Bausch & Lomb Optical Company of Rochester, N. Y., in announcing the 75th anniversary of its founding, pays a graceful tribute to the memory of John Jacob Bausch and Henry Lomb, its founders. It was the foresight and industry of these two young immigrant lensmakers that built up the present vast institution that has contributed so much to the progress of optical science.

THE SCHOOL BOARD JOURNAL extends its congratulations and appreciation of the great service which the firm has rendered to the science of optics in this country.

NEW EYESAVER RULER

The Seneca Falls Rule & Block Company of Seneca Falls, N. Y., has placed on the market an "eyesaver" ruler for school use. The "eyesaver" ruler, which has been designed by an authority in school matters, is printed in three strong contrasting colors. On the reverse side are found a combination inch scale, also a protractor. The illustration shows one feature of the ruler.



THE SENECA "EYESAVER" RULE

School authorities who are interested in this new ruler may obtain a sample and complete description by writing to the Seneca Falls Rule & Block Company at Seneca Falls, N. Y.

LYON METAL PRODUCTS COMPANY CONSOLIDATES WITH DURAND STEEL LOCKER COMPANY

The Lyon Metal Products, Inc., has taken over the business of the Durand Steel Locker Company of Chicago Heights, Ill., and the Lyon Metallic Manufacturing Company of Aurora, Ill.

The consolidation brings together two of the oldest and largest companies in the steel locker field. The capital stock of the corporation is five million dollars and the present sales volume reaches an annual figure of over eight million dollars.

The Lyon Metal Products Company manufactures a complete line of steel shelving, lockers, cabinets, general steel storage equipment and furniture and the firm enjoys a wide acquainance in the school field.

The officers of the firm are Mr. F. S. Waters, president; Mr. Keith Spalding, Mr. W. N. Vance, and Mr. C. E. Gerberich, vice-presidents; Mr. B. L. Waters, secretary; and Mr. W. B. Brown, treasurer.

The executive offices will be located at Aurora, Ill., where the company plans to erect additional buildings and equipment for the manufacture and sales of its new steel products.

The manufacturing plants are located at Chicago Heights, Ill., and Aurora, Ill., with assembly plants at Jersey City, N. J., and Los Angeles, Calif.

BOWLUS COMPANY MANUFACTURES JEWEL FLUSH VALVE

The Bowlus Mfg. Company of Springfield, Ohio, has announced the marketing of its new Jewel seat-operating closet. The closet has a reputation for durability and efficiency in school buildings due to the use of the Jewel flush valve, which makes it possible to operate with 100 per cent efficiency under a water pressure of 5 to 15 lb.

The Jewel flush valve is the main mechanical element of the new seat-operating closet. This feature is of special advantage due to the simplicity of operation, minimum of maintenance cost, and placing of the operating springs to prevent rust and corrosion.

NEW JOSAM CATALOG OF DRAINS AND TRAPS

The Josam Manufacturing Company of Cleveland, Ohio, has issued its new catalog G for 1928, which contains 71 pages devoted to drains and traps for floors, urinals, showers, and swimming pools in school buildings.

The catalog lists and describes such products as the Josam all brass double-drainage shower and floor drain, double-drainage shower, urinal, and floor drain, double-drainage shower and floor combined drain and trap, double-drainage shallow type shower and floor combined drain and trap, Josam deep seal traps, Josam double-drainage floor drain and cesspool, double-drainage extra heavy floor drain and cesspool, Josam swimming-pool connection with brass fan-shaped inlet, Josam reversible-angle swimming-pool outlet, Josam swimming pool main outlet drain, Josam swimming-pool inlet, also strainers and accessories, interceptors, swing check valves, shock absorbers, closet fittings and bends, and Josam duriron double-drainage floor drains and traps.

The catalog contains a strainer chart showing the number and position of strainer and drain connections.

Complete information and price lists of these products may be obtained by writing to the Josam Manufacturing Company at 4900 Euclid Ave., Cleveland, Ohio.

ISSUE NEW CATALOG OF KEWANEE BOILERS

The Kewanee Boiler Corporation of Kewanee, Ill., has just issued its new catalog No. 84*a* describing and illustrating its coal-burning and oil-burning boilers for use in school buildings.

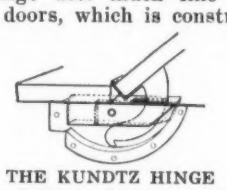
The Kewanee Type C boiler is built of steel plate, solidly welded into a homogeneous unit by an electric-arc-puddling process, and represents the best modern practice in steel boiler construction.

The Type C smokeless boiler is built according to the A.S.M.E. code for low-pressure heating boilers, is scientifically designed and is the product of the best boiler construction. The furnace has extra width and height to promote complete combustion, and the water content is ample to absorb all the useful heat without undue disturbance. A new feature is a device for keeping the top flues under the water line making possible the liberation of steam unimpeded. The steam space has unusual height to insure a continuous flow of dry steam into the heating system.

School authorities and architects who are interested in a simple, economical heating boiler should address their inquiry to the Kewanee Boiler Corporation at Kewanee, Ill.

NEW KUNDTZ AUTOMATIC FRICTION HINGE

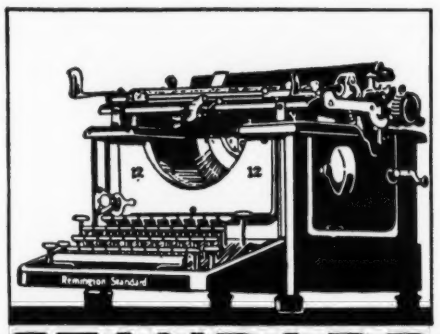
The Theodor Kundtz Company of Cleveland, Ohio, manufacturers of school furniture, have produced an improvement in school furniture, involving a combination hinge and retarding device which controls the desk lid and prevents it from falling down. The hinge acts much like the hydraulic stop on heavy doors, which is constructed on sim-



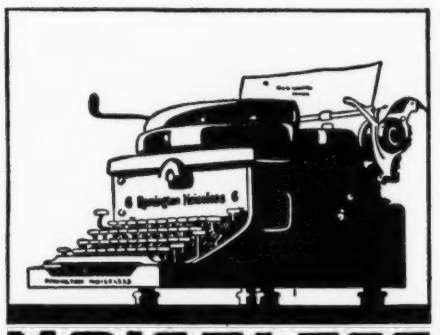
THE KUNDTZ HINGE

pler principles of direct friction. The hinge maintains a quiet atmosphere conducive to study and concentration by eliminating the noise and confusion, and it adds years of life to the desk by preventing jars and vibrations.

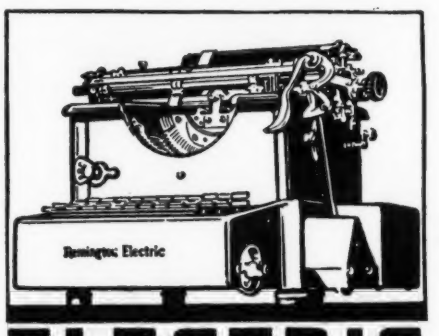
The present device follows the introduction of an enamel finish for school desks, which has the advantages of exceptional beauty in use and greater resistance to wear. The new hinge is the first notable improvement on school desks since the development of the chair-desk.



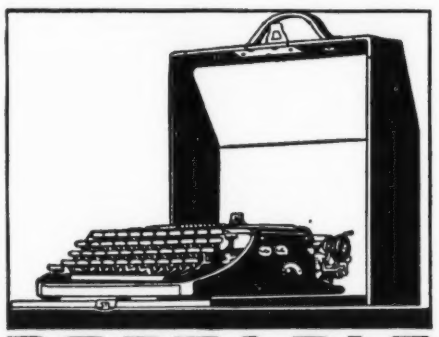
STANDARD TYPEWRITERS



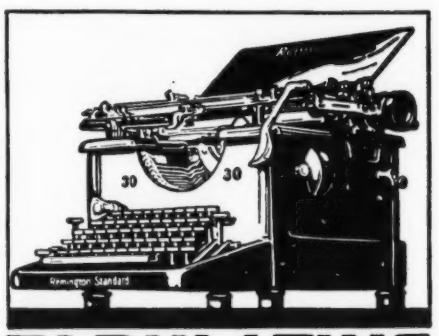
NOISELESS TYPEWRITERS



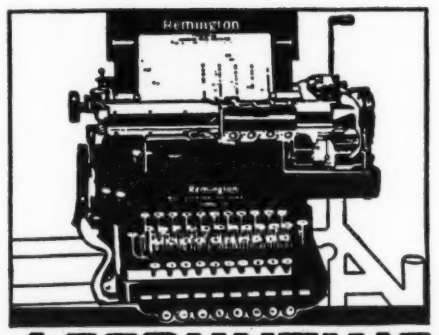
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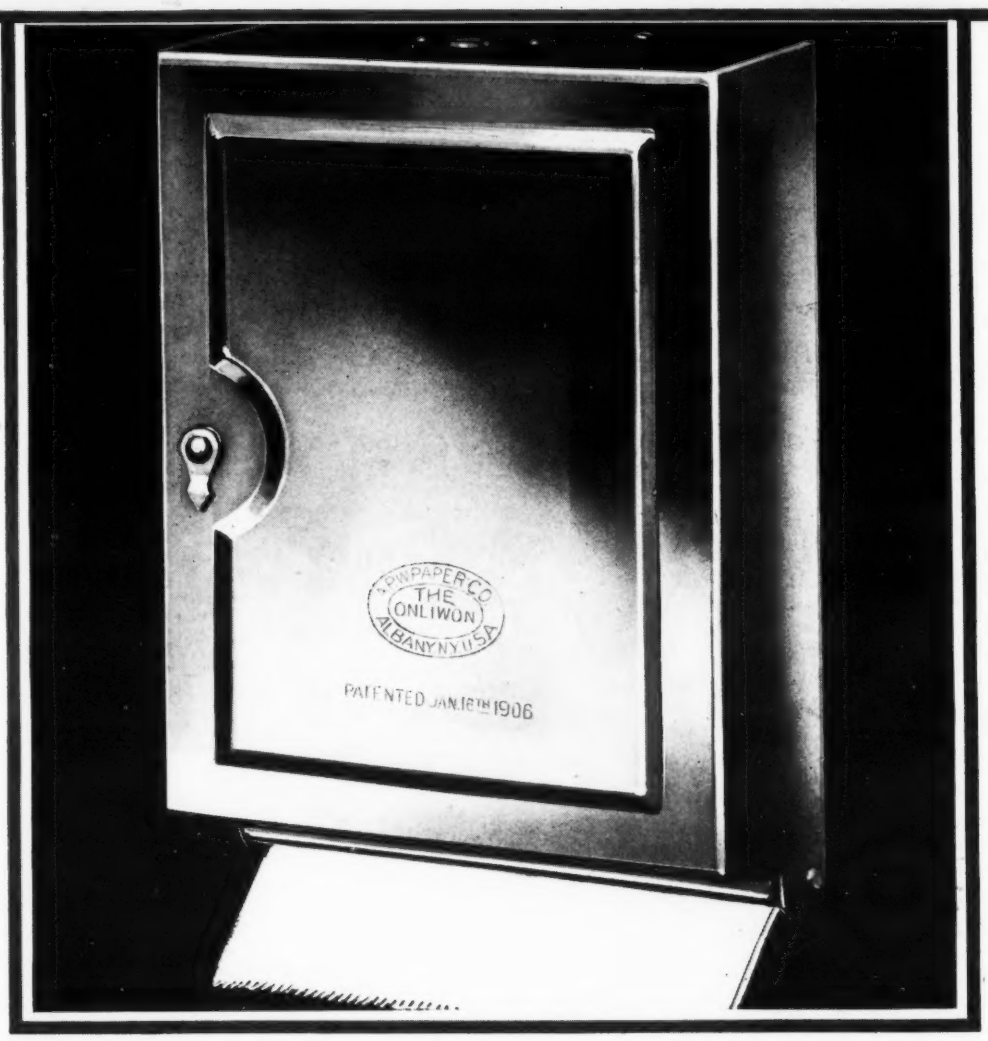
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